

**WOMEN'S EXPERIENCES WITH BREASTFEEDING SUPPORT:
CONFLICTING PRACTICES AND DISCOURSES**

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Abstract

Drawing on insights from critical scholarship on medicalization and professionalization, this thesis explores women's experiences with breastfeeding support in the context of medical, institutional, health policy and professional forces in Ontario, Canada. Drawing on 10 qualitative, semi-structured interviews and 41 in-depth surveys completed by women who initiated breastfeeding; the results provide insight into how hospital practices, the lactation consultant profession and pharmaceuticals to support breastfeeding can shape breastfeeding support and in turn, impact women's breastfeeding experiences. The findings demonstrate that the women relied heavily on professional breastfeeding support both in hospital and in the community and experienced a disparity between their expectations and the reality of breastfeeding. This research finds that often the conflicting practices and discourses of medicalized and professionalized breastfeeding support recreates breastfeeding as a technically challenging process that requires medical and expert intervention, rather than a natural and easy process as it is often portrayed and promoted.

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Chapter One: Introduction

While childbirth and infant feeding have been medicalized for over a hundred years, the medicalization of breastfeeding is arguably a recent phenomenon. In North America in the early twentieth century, childbirth moved from the home, attended by midwives, to the hospital, employing medical interventions and doctors (Wolf 2012; Nathoo and Ostry 2009). During the same period, in an effort to establish their discipline, paediatricians pursued the creation and dispensing of effective infant formula (Apple 1994). These changes, which promoted a medical definition of childbirth and infant feeding, contributed to the move away from breastfeeding (Wolf 2012). Subsequently, breastfeeding rates in Canada declined, reaching a low in the 1960s. Efforts of the natural birth movement, among other groups, revived interest in breastfeeding and rates have been increasing in Canada since the 1970s (Nathoo and Ostry 2009).

In contemporary health promotion discourses, ‘breast is best’ and breastfeeding is portrayed as an easy and natural act that virtually all women can do (Best Start Resource Centre 2014). However, research has indicated that many women feel pressure to breastfeed and experience a disparity between how breastfeeding is portrayed and the reality they experience (Burns et al. 2010; Hoddinott et al. 2012). Increased rates of breastfeeding demonstrate a shift to demedicalize infant feeding, but as breastfeeding rates have increased, so too have the rates of breastfeeding difficulties women experience (Barclay et al. 2012).

The majority of breastfeeding women utilize breastfeeding support programs and many forces influence the shape of this contemporary support: Almost all Canadian women give birth in hospital and the majority of those women experience interventions during labour and delivery (Chalmers et al. 2010). In the hospital setting, medicalized breastfeeding support often follows

medicalized births and involves risk-averse infant care protocols. In an effort to counter these medical practices, the Baby-Friendly Initiative, a WHO/UNICEF initiative to protect, promote and support breastfeeding (WHO/UNICEF 2009a), is increasingly being implemented. This Initiative was designed to demedicalize infant feeding, but in practice, results to date have been uneven and BFI practices contribute to both medicalization and demedicalization of breastfeeding (Barclay et al. 2012).

The profession of lactation consultancy, which emerged in the 1980s and has grown exponentially, is a unique component of breastfeeding support. Here too, a conflict in discourses and practices arises as lactation consultants support the demedicalization of infant feeding through breastfeeding, but often use a medicalized approach to support breastfeeding (Torres 2014).

Contemporary breastfeeding support, primarily provided by the health care system as opposed to family or community members, situates breastfeeding in a medical context. This context and the medical management of breastfeeding contrasts with how breastfeeding is portrayed in health promotion discourses, prenatal education and the media. Critics have questioned the benefits of this type of support: despite heavy promotion and a growing number of health care support services available, breastfeeding rates consistently fail to meet targets and remain relatively low (Barclay et al. 2012).

Critiques of medicalization and professionalization scholarship are used in this study to explore the impact of medical and professional forces on breastfeeding and breastfeeding support. These lenses are ideal as they provide insight into the forces which are shaping contemporary breastfeeding support programs. Conrad (1992) stated that medicalization is a

sociocultural process which occurs when a problem is defined and understood in medical terms and/or a medical intervention is used to treat it. Through this lens I will explore how, in a hospital, following a medicalized birth, the practice of breastfeeding is often pathologized and medical devices, formula and pharmaceuticals are increasingly used to support breastfeeding. I will also use Halfmann's (2011) medicalization continuum and typology to critique how conflicting discourses, practices and identities of medicalization and demedicalization impact breastfeeding.

Lactation consultants, through their clinical management of breastfeeding, have contributed to the professional, medicalized approach to breastfeeding support. Professions use their higher education requirements, expertise, knowledge monopolies and gatekeeper activities to establish their status and legitimacy (Freidson 1970; 1986). In this study, I also explore how lactation consultants, through their pursuit of professional status, are changing the way breastfeeding is supported.

For my study I employed qualitative, semi-structured interviews completed with 10 women and surveys completed with 41 women to explore breastfeeding and breastfeeding support as sites of medicalization, demedicalization and professionalization, and how the confluence of these forces can significantly shape women's breastfeeding experience.

Research Questions

The purpose of this study is to document women's experiences with hospital and post-discharge breastfeeding support and to explore how factors, which influence this support, impact women's breastfeeding experiences. The research questions for this investigation were: 1) What impact do breastfeeding supportive hospital practices have on the breastfeeding experiences of a

group of Ontario women? 2) What impact do community-based breastfeeding supportive programs have on the breastfeeding experiences of these women? 3) Which support services do these women access and use and how do they experience this support? 4) Is the support viewed as positive or negative, effective or ineffective by these women?

This new type of professional, medical breastfeeding support is important to study as supportive interactions, in the first weeks after birth significantly impact women's experiences with breastfeeding and motherhood. Critical medicalization perspectives have been useful in making explicit the impact of the medical model on childbirth and infant feeding. As this medical approach transforms breastfeeding support, my study aims to extend the analysis and contribute to the literature on how breastfeeding is reconceptualised for women in this context.

Many studies have analyzed the impact of socio-economic factors on breastfeeding (Pincombe et al. 2006; Sheehan and Schmied 2011; Thomson and Dykes 2011; Andrews and Knaak 2013; Brown et al. 2013) or examined the impact of breastfeeding support programs on breastfeeding exclusivity or duration (Hannula et al. 2008; Beake et al. 2012; Renfrew et al. 2012; Sinha et al. 2015), but research is scant on how the conflicting discourses and practices of hospital practices, lactation consultants, pharmaceuticals, and formula used to support breastfeeding influence breastfeeding support and how these supports impacts women's breastfeeding experiences.

Thesis Overview

This study utilizes critical medicalization and professionalization perspectives to analyze factors which influence the type and manner of support provided to breastfeeding women. Emphasis is placed on understanding a group of women's breastfeeding experiences and the

significance of breastfeeding support as an integral aspect of this experience within the broader context of medical and professional forces which shape this support.

In Chapter two, this thesis begins with a review of the sociological literature related to critiques of medicalization and professionalization, the analytical perspectives used in this study. Chapter three provides a review of the literature and provides background on hospital practices, such as medicalized births, medical formula use, infant care protocols and the Baby-Friendly Initiative, the rise of the lactation consultant profession and the use of pharmaceuticals to support breastfeeding. Chapter four outlines the methodology and methods used to conduct the research for this study. Chapter five examines the research findings about the women's experiences with breastfeeding support, how key factors shape this support and the impact of this support on their breastfeeding experiences. Finally, Chapter six provides a conclusion, strengths and limitations and directions for future research.

Chapter Two: Analytical Perspectives

Introduction

In this study I employ concepts from critical medicalization and professionalization scholarship to analyze the impact of contemporary medicalizing and professionalizing forces on breastfeeding support programs and how women's breastfeeding practices are influenced by these forces. The following chapter outlines the critical medicalization and professionalization perspectives used in my study.

Medicalization Critique

The medicalization critique has been used to understand the power of medicine in society in many different contexts. Combining conceptualizations from Conrad (1975; 1992; 2007), Conrad and Schneider (1980) and Halfmann (2011), I draw on this literature for the analysis of my data. Below I provide a brief review of these perspectives and discuss the medicalization of infant feeding, breastfeeding and breastfeeding support.

Conrad's definition of medicalization is often cited: "a process by which nonmedical problems become defined and treated as medical problems, usually in terms of illness or disorders" (1992:209). The first noted scholars of medicalization, Parsons (1951), Szasz (1960) and Wootton (1959) began the dialogue on medicine, power and society. Parsons (1951) identified the "sick role" and medicine as an institution of social control; while Wootton (1959) critiqued that when medical answers were applied to social problems, blame was shifted from society to the individual. In the 1970s, scholarship on medicalization came to prominence with

Freidson (1970), Zola (1972) and Conrad (1975). Both Freidson and Zola attributed the new emphasis on health and the technical approach to life as factors which increase medicalization.

In 1980, Conrad and Schneider stated that medicalization takes place on three distinct levels: conceptual, institutional and interactional. The conceptual level is where medical vocabulary is used to define the problem, but may or may not include medical involvement (Conrad and Schneider 1980). The institutional level is where organizations adopt a medical approach to treating a problem for which the organization specializes (Conrad and Schneider 1980). Finally, the interactional level is where, through doctor-patient interactions, the doctor defines a problem as medical or prescribes medical treatment for a social problem (Conrad and Schneider 1980).

Drew Halfmann (2011) extended Conrad and Schneider's conceptualization of medicalization by adding discourses, practices and identities as points of analysis. He argued that Conrad and Schneider's focus on discourses was too narrow and needed to be extended to other practices, such as measurement and normalization; other actors, such as researchers, nurses and hospitals and to identities which lay people embrace such as "patient" or "high-risk".

Halfmann (2011) stated that medicalization increases when medical definitions and models become more prevalent in discourses of everyday life. Discourses can be produced by governments, international organizations, and universities, and the media, policies, procedures and mission statements convey the discourses of institutions such as hospitals and schools. Medical discourses can also occur between health care providers and clients and can be reproduced by clients. Halfmann's (2011) next dimension, practices, illustrated an increase in medicalization when medical practices and technologies become increasingly prevalent. These

practices can include measurement, normalization, surveillance and the use of pharmaceuticals and medical devices. The state may require or pay for testing or surveillance; organizations may employ medical practices and interactions between health care providers and clients involve medical practices and procedures. Halfmann's final dimension demonstrated how identities can contribute to an increase in medicalization when medical actors become more prevalent and powerful when addressing social problems. Medical identities can influence operations at all levels. By separating the levels and sources of medicalization, the conflicts between medicalization and demedicalization can be made explicit. Halfmann conceded that a typology is neat while reality is not, but argued that this type of tool can facilitate the identification and subsequent nuanced analysis of multiple variations of medicalization (2011).

Halfmann's extension will facilitate a detailed analysis of breastfeeding support discourses, from varied sources, such as government, hospital and health care provider. Explicitly analyzing the impact of practices highlights the complexities in providing breastfeeding support through hospitals and public health programs. Finally, Halfmann's inclusion of identities explicates how individuals enact medicalized approaches and roles in breastfeeding support and the effect of medicalization which occurs at the individual level.

Halfmann (2011) also advocated that medicalization and demedicalization need to be analyzed on a continuum, not as categories. By considering medicalization as a continuum, Halfmann argued that 1) analysis is not dependent on a threshold of medicalization, 2) a continuum recognizes incremental increases and decreases in medicalization or demedicalization and 3) this approach acknowledges that medicalization and demedicalization can occur simultaneously (2011). For example, aspects of childbirth have been demedicalized: partners are allowed in the room, women are rarely sedated, shaving and enemas are no longer common

practice but medicalization has also increased with the rise of birth interventions and caesarian sections.

Halfmann's medicalization continuum is an ideal tool to analyze contemporary breastfeeding support programs. The return to breastfeeding is a force to demedicalize infant feeding, but contemporary breastfeeding supports are offered through the health care system, placing breastfeeding in a medical context and using medical interventions to support it. Aspects of breastfeeding support, such as BFI, attempt to enhance demedicalization, but often the hospital environment creates barriers to this demedicalization. Using a continuum of medicalization is particularly useful when analyzing the impact of lactation consultants. The lactation consultant profession was created to provide specialized support to specific breastfeeding women, but as the profession has grown and has sought a place in the wider health care system, the nature of the support provided has become increasingly medicalized (Eden 2012). Viewing the medicalization of breastfeeding support on a continuum also makes explicit the conflict between forces of medicalization and demedicalization. This conflict is important to study as it significantly impacts the women who utilize breastfeeding support.

These medicalization critiques are useful to provide insight into contemporary breastfeeding and breastfeeding support. While infant feeding has been medicalized for more than a century, the medicalization of breastfeeding is a relatively new development. In the early twentieth century, breastfeeding was deemed inferior and formula was promoted as the modern, scientific way to feed babies (Avishai 2007). In high income nations, formula feeding became the norm, but mothers who persevered with breastfeeding enjoyed a relatively expert-free cultural space, unregulated by the medical establishment (Apple 1987 in Avishai 2007). For these reasons, the medicalization of breastfeeding needs to be conceptualized separately from the

medicalization of infant feeding. Eden (2012) asserted that the medicalization of breastfeeding involves professional or expert management, technology and interventions and increasing scientific and medical research into breastfeeding and breastmilk. As breastfeeding rates increased and the medical establishment became involved with breastfeeding, the benefits of breastmilk were made medical. Public health discourses began to describe the nutritional and immunological benefits of breastmilk and the medical establishment paradoxically began to promote both the benefits of breastfeeding and of infant formula. Torres (2014) argued that by defining breastmilk and breastfeeding in medical terms, breastmilk is constructed as a medical product.

The relationship between women, medicine and health care reforms must also be acknowledged when examining the medicalization of breastfeeding support. Childbirth is the most common reason for hospitalization in Canada, and the number of hospitalizations for childbirth is four times higher than the next most common reason for hospitalization (CIHI 2015). Therefore, through childbirth (and subsequent breastfeeding) women are frequent users of the health care system. In recent years, the Canadian health care system has been significantly impacted by health care reforms. Funding models based on fee-for-service payments for both doctors and institutions can reinforce a medical approach and impact decision-making regarding the best course of care (Armstrong and Armstrong 2010). Funding structures require hospital practices to prioritize measurable outcomes rather than the process of care. In labour and delivery and maternity care, reforms have pushed for greater efficiencies which have promoted standardized care and adherence to protocols over individualized care paths (Schmied et al. 2014). Barclay et al. noted that reforms have reshaped hospital birth, created new problems through medical care (iatrogenesis) and are also impacting breastfeeding support: “[A]s in

normal birth there are now economic drivers of a new profession [lactation consultancy] that continue to re-frame breastfeeding as expert territory and appear to be contributing to an iatrogenesis that distresses women and infants and is becoming costly to the community” (2012:282).

These reforms, which affect all aspects of the Canadian health care system, have typically reinforced the medical model through restricted care and reduced funding and the resulting cuts to staffing and resources in hospitals and health care facilities (Armstrong and Armstrong 2010; Choiniere 2011; Barclay et al. 2012; Schmied et al. 2014). Medicalization does not automatically follow reforms, but rather, frequently results when medicalization intersects with the demands reforms place on institutions and health care providers. This intersection prioritizes efficiencies, performance measures and outcome indicators (Choiniere 2011; Schmied et al. 2014). These changes place pressure on health care providers to standardize care, increase turnover and shorten hospital stays (Armstrong and Armstrong 2010; Choiniere 2011). Medicalization is reinforced by these reforms when more time consuming practices, such as one-on-one breastfeeding support, are reduced and emphasis is placed on practices regarded as more efficient, such as formula supplementation (Schmied et al. 2014). The medical approach dominates when reforms which drive efficiencies and standardized care intersect with medicalization and promote measurable and quantifiable practices (Barclay et al. 2012) - formula supplementation at discharge increases a baby’s weight quickly and efficiently and allows staff to meet patient discharge targets.

It is also important to acknowledge the omissions that drive medicalization. Women are absent from many aspects of health research and policy despite using the health care system more than men and dominating in the majority of health care roles such as nursing and

midwifery (Armstrong 2015). These absences also contribute to the vulnerable position of women's health care in the face of medicalization.

Considering women's experiences in the health care system, the impact of health care reforms and the medicalization of infant feeding provides context for my analysis of breastfeeding support. By viewing medicalization on a continuum and analyzing it through discourses, practices and identities across multiple levels I can use the women's responses and narratives to explore the multiple sites and mechanism of medicalization in breastfeeding support.

Professionalization Critique

In this section I provide a brief background on the sociology of professions, provide details of Freidson's conceptualization of a profession, discuss gender and professions, and conclude with an exploration of the professionalization of lactation consultancy.

The professionalization of breastfeeding support, particularly the growth and proliferation of lactation consultancy offers conflicting discourses and practices which can reshape the breastfeeding experience. The purpose of this section is not to provide a detailed analysis of the professionalization of breastfeeding support, but rather to offer background, context and analytical direction to my exploration of how professionalized breastfeeding support, through the lactation consultant role, impacts women's breastfeeding experience.

The sociology of professions is the study of expert occupations through the analysis of their organization, types of work and social status (Abbott 2001). Professions are a complex form of social organization that have garnered much sociological thought and debate. By the 1960s sociologists had delineated three dominant positions on the constitution of professions. A

structural-functionalist perspective posited that a distinctive set of traits defined a profession (Lewis 2010). This perspective identified expertise, collective organization, collegial control, ethical standards and involvement in public service as traits that defined a profession (Brint 1993). Process, rather than traits, was the focus of the second position on professionalization which aligned with a Weberian perspective and analyzed how an occupation becomes a profession (Lewis 2010). This perspective denied universal traits and focused on the stages of the process to professionalize (Eden 2013). The third position drew attention to the historical and contemporary usage of the term profession and analysis focused on how members of society viewed the occupation and how they employed the term profession at a given time (Brint 1993).

Eliot Freidson, a noted sociologist of medicine and professions, departed from these three perspectives in his conceptualization of professions. Freidson was part of a wave of social scholars who injected skepticism into the analysis of professions and their role in society. In his seminal book, *Profession of Medicine* (1970), Freidson highlighted aspects of power and control as factors shaping professions (Halpern and Anspach 1993). The goal of professionalization, as Freidson saw it, was to achieve a monopoly over the specialized tasks by convincing the state and public that they needed the services of the profession (Freidson 1970).

As his analysis of professions developed, Freidson (1986) conceptualized professions as a socially constructed linkage between specialized tasks, higher educational requirements and specific labour markets. His conceptualization placed an emphasis on higher educational requirements. He argued that requirements of higher education “presupposes exposure to a body of formal knowledge, a professional ‘discipline’” (Freidson 1986:xii). Freidson stated that professional associations and state regulation are secondary to the specialized tasks which are developed through an institutionalized association with higher education (Brint 1993). In dealing

with specific labour markets, Freidson (1986) argued that credentialing institutions and higher education combine to produce exclusive access to the desired labour market, and he saw the tight control over the labour market as what supports and drives the power and privilege of professionals. I use Freidson's conceptualization to analyze how the professionalized lactation consultant role impacts breastfeeding women through their interactions with breastfeeding support.

Freidson (1986) also identified the advantages conferred by knowledge monopolies, gatekeeping and the constraints of countervailing forces as the key factors which shape professions. Knowledge monopolies, the ability of the professional to control how their work is accomplished, is the most fundamental and widespread power of professionals (Freidson 1986). Freidson argued that gatekeeping, which defines a position of interpretation and judgment, creates another major source of professional power. Freidson noted the influence of countervailing forces, which constrain the expression of professional power. Professional power is not absolute but rather tempered by wider prevailing forces such as other organizations, the public, government and resources (Freidson 1986).

Lactation consultancy is a profession created and dominated by women. Gender is an important, yet understudied, component in the study of professions and professionalization (Witz 1992; Armstrong 1993; Adams 2003; Davis-Floyd et al. 2004; Yam 2004; Torres 2015). Historically omitted from much early theorizing about professions, studies that investigate the complex role of gender in professionalization are increasing. The professionalization of female-dominated work like nursing, midwifery and dental hygiene must be understood in the context of male-dominated medicine. Yam (2004) noted that the evolution of nursing from the apprenticeship model of Florence Nightingale to a professional discipline was hard fought. Male

dominated roles such as doctors and dentists supported the creation of female occupation roles, as an attempt to subordinate and limit women's opportunities (Witz 1992). As these occupations have pursued professional status they have met with resistance and limited success (Armstrong 1993; Eden 2013). Adams (2003) noted that female-dominated professions have been defined as "qualified" professions; semi-professions, subordinate professions or "aspiring" professions. The gap in women's occupations has often been attributed to the fact that the professional model is seen as a 'masculine model' (Yam 2004). Adams (2003) stated, based on her study of Dental Hygienists in Ontario that female dominated professions attempt to both imitate the model of professionalization established by classic male-dominated professions and also to challenge that model. In Yam's (2004) commentary on the professionalization of nursing, he illuminated the ubiquitous link between nursing and femininity. He stated that nurses are perceived, across many cultures, to be powerless and unable to function in a position of power or independence.

Armstrong (1993) in her commentary *Professions, Unions, or What?: Learning from Nurses* stated that nurses, in their quest to improve their position, adopted the model of a professional association from medical doctors, the most immediate example and most powerful group in the health care system. Lactation consultants, who are predominately nurses, have also chosen to emulate the medical doctor's professional model (Eden 2013). Armstrong cautioned that this model is inadequate for a nursing role and "may mean abandoning the traditionally female commitment to care and interdependence" (1993:309). Lactation consultants also run the risk of losing the essence of their purpose in their pursuit of legitimacy and status.

Lactation consultants have capitalized on a gap in health care provisioning. In the 1970s as breastfeeding began to regain popularity and legitimacy, the established medical profession did not try to claim responsibility for breastfeeding support (Torres 2015). The medical and

scientific realm focused primarily on infant formula as its locus of control and the role of the lactation consultant grew in a vacuum. Midwives and obstetricians continue to compete for control over normal births, but lactation consultants do not compete with other health care professionals for the clinical management of breastfeeding. This created an opening that lactation consultancy actively pursued through their professional association, rigorous education and training requirements, and exclusionary credentialing. The professionalization of a social and emotional process like breastfeeding creates conflicting practices and discourses which often disadvantage, rather than benefit breastfeeding women (Barclay et al. 2012). In this thesis I will explore how this professionalization impacts breastfeeding women.

Research in the sociology of professions has contributed valuable insight and debate but a gap exists in the scholarship on the impact of professionalization on the client. Scholarship has focused on groups seeking professional status, professions in transition and the impact of professionalization on individuals within a profession, but research is limited on the impact on the users of a professionalized service. Freidson's conceptualization is appropriate for this analysis, placing necessary emphasis on varied aspects of the profession and situating the profession in the wider social context. Lactation consultancy is a new profession, which must work within the wider, dominant medical system and is a female-dominated profession which has encountered additional challenges in a male-dominated environment.

Conclusion

These medicalization and professionalization critiques provide insight into the forces which are shaping contemporary breastfeeding support programs. Utilizing perspectives from Conrad, Halfmann and Freidson I will explore how medical and professional approaches to breastfeeding support impact women's breastfeeding experiences.

Chapter Three: Background and Literature Review

Introduction

This chapter provides background and context for the study, beginning with a summary of the research process. The following sections offer an overview of breastfeeding in Canada, as well as background on breastfeeding experiences and breastfeeding support. The subsequent sections provide a review of the existing literature on the factors, which my data have shown to influence contemporary breastfeeding support: hospital practices, lactation consultants, and pharmaceuticals used to support breastfeeding.

Research Process Background

Since its introduction 25 years ago, researchers have studied the Baby-Friendly Hospital Initiative (BFHI) in-hospital and post-discharge breastfeeding support programs, with a focus on breastfeeding rate comparisons and the effectiveness of breastfeeding support practices on breastfeeding outcomes.

A review of the literature reveals a paucity of Canadian and sociological research on breastfeeding support programs and how they are experienced by breastfeeding women. Of the research conducted thus far, the majority comes from medical, nursing or midwifery perspectives with research that is predominately quantitative in nature. A search of Sociological Abstracts revealed only one article for which breastfeeding support is the main focus. In a French language publication, Moreau et al. 2010, explore mothers' expectations and experiences with breastfeeding and breastfeeding support. Additionally, no articles studying BFI in Canada were found in Sociological Abstracts and only two articles studying the BFHI or the effects of in-

hospital breastfeeding support programs were found; one article studied BFHI programs in Brazil and the other BFHI programs in China. Two wider searches of the ProQuest databases were conducted. Results for scholarly articles with “Breastfeeding” and “Baby-Friendly” in the title or abstract reveal approximately 240 results, and of these, only 11 articles were based on research conducted on Canadian subjects. A second search using the terms “breastfeeding”, “support”, or “intervention” and “interview” resulted in 37 articles, 24 of which included interviews with mothers. For the wider research conducted for this study, PubMed and Ovid databases were used. In addition, an internet search for grey literature was conducted. The regional reports, government reports and theses used for this study were obtained through this search. Results from all searches informed the background and literature for this study.

The research on Canadian subjects often used studies on breastfeeding support programs in international locations, such as Cuba, China, Belarus, U.S. (Canadian Paediatric Society 2012) Sweden, Switzerland, U.S. (Pincombe et al. 2006) to compare or validate its findings. This practice highlights the need for relevant Canadian research on women’s experiences with breastfeeding support programs and how key aspects of these programs influence women’s breastfeeding experiences. A woman’s breastfeeding practice exists within her social, cultural and political milieu. For this reason, it is not optimal to use results from a study conducted on practices in low income nations, and it is difficult to extrapolate results from other high income nations, which typically have different maternity policies, health care systems and cultural perspectives.

Breastfeeding and Breastfeeding Support

The literature on breastfeeding portrays it as the healthiest and most beneficial way to feed a baby but studies report that the majority of Canadian women are not breastfeeding for the recommended duration. Studies of women's breastfeeding experiences draw attention to the fact that many women have expectations which are not met by the reality of breastfeeding. This literature review illustrates conflicting aspects of contemporary breastfeeding and breastfeeding support and illuminates the benefits of further study into how women experience breastfeeding support and the forces that shape that support.

Breastfeeding is viewed by the World Health Organization (WHO) and Health Canada as the normal way to feed a baby and as providing the best start in life (Health Canada 2015a; WHO/UNICEF 2016). Studies suggest that both baby and mother derive numerous health benefits from breastfeeding: the baby benefits from a decrease in the incidence of multiple infectious respiratory and gastrointestinal diseases, obesity, diabetes, asthma, as well as a decrease in Sudden Infant Death Syndrome (SIDS) and improved neurocognitive development (Health Canada 2015a; WHO/UNICEF 2016). The mother benefits from a decrease in the incidence of both breast and ovarian cancer (Best Start Resource Centre and Baby-Friendly Initiative Ontario 2013; WHO/UNICEF 2016). Given these many advantages, the WHO, the Canadian Paediatric Society and Health Canada recommend exclusive breastfeeding from birth and continued breastfeeding with appropriate complementary foods for up to two years and beyond (Canadian Paediatric Society 2012; Health Canada 2015a; WHO/UNICEF 2016).

Statistics on breastfeeding typically measure initiation, exclusivity and duration. Health Canada (2012) defines initiation as putting baby to breast and breastfeeding or trying to breastfeed at least one time. Exclusive breastfeeding is defined as feeding the baby only breastmilk, no other foods or liquids other than vitamins and medicines (Health Canada 2012).

Duration of breastfeeding is typically measured for exclusive and/or any (partial) breastfeeding, the latter being when the baby is breastfed but also given other liquids such as formula or water. Research has identified greater benefits from breastfeeding with longer durations (Owen et al. 2005; Belfort et al. 2013). In addition, studies have found that exclusive over partial breastfeeding confers greater benefits to babies and mothers (Chantry et al. 2006; Kramer and Kakuma 2009). These and other studies have informed the WHO and governmental recommendations on the duration and exclusivity of breastfeeding.

Approximately 90% of Canadian mothers initiate breastfeeding with 61% exclusively breastfeeding at discharge from hospital and only 14% exclusively breastfeeding at 6 months (Chalmers 2013). The fact that 90% of Canadian mothers initiate breastfeeding implies that breastfeeding is regarded as desirable and beneficial by these women. Yet, mothers' desire to breastfeed and the numerous health benefits associated with its practice do not align with the fact that the majority of Canadian mothers do not breastfeed past the first few weeks.

Support programs are specific practices or services designed to assist women with breastfeeding. For the purposes of this study, support programs are defined as direct support provided to breastfeeding women through hospital or community health facilities. Hospitals, public health departments and doctor's offices offer breastfeeding clinics and telephone support services are provided by both health care providers and peers. All breastfeeding support services included in this study were provided free of charge.

While the above services do not charge a fee, wider economic factors may discourage or prohibit women from accessing these services. Lack of transportation, time, telephone service or support in the form of childcare, among other factors, limit women's resources and may prevent

them from utilizing these free services. Support in the wider context, such as social assistance, paid maternity leave, workplace accommodation and health care funding are critical factors that can shape a woman's breastfeeding experience, but are not within the scope of this study. Also, many factors in addition to hospital practices and support programs have a significant impact on a woman's breastfeeding practice: maternal (her desire to breastfeed or not, confidence and self-efficacy, age, marital status) and social, economic and cultural factors (Pincombe et al. 2006; Sheehan and Schmied 2011; Thomson and Dykes 2011; Andrews and Knaak 2013; Brown et al. 2013). Findings from the 2009-2010 Canadian Community Health Survey stated that older, married women with higher income and higher education initiate breastfeeding more frequently and breastfeed for longer (Health Canada 2012). While maternal, social, economic and cultural factors are integral and highly relevant to understanding women's experiences with breastfeeding support, particularly to the extent that poverty and a lack of education make accessing support more difficult and employment make it particularly difficult, these factors are beyond the scope of this study. While not addressing these social determinants of health, this study endeavours to provide insight into women's experiences with breastfeeding support. There is a gap in the research on breastfeeding support programs. Numerous studies have analyzed the relationship between breastfeeding support and breastfeeding rates, but few have examined women's experiences with these programs. The latest Cochrane Review acknowledged that research is needed that examines maternal experiences, satisfaction and well-being stating "these elements are consistently poorly evaluated" (Renfrew et al. 2012:23).

Research has identified that women often experience a disparity between their expectations of breastfeeding and the reality of breastfeeding (Nathoo and Ostry 2009; Moreau et al. 2010; Burns et al. 2010; Hoddinott et al. 2012; Leurser and Misskey 2015). Burns et al. (2010)

in their meta-ethnographic synthesis of women's breastfeeding experiences identified 'expectations and reality' as one of their respondent's main themes. This theme reflected the participant's expectations of breastfeeding as a natural process and the reality that breastfeeding was not necessarily easy (Burns et al. 2010). In Kelleher's (2006) study, the women were often surprised at the level of discomfort and pain they experienced, which contrasted sharply with their perception that breastfeeding would be natural and easy. Realistic expectations are important as numerous studies have found that women with realistic expectations of breastfeeding breastfeed for longer (Whelan and Lupton 1998; Hegney et al. 2008).

Burns et al. (2010) stated that participants in the studies surveyed reported that they felt considerable pressure to breastfeed from professional discourses. Health promotion messaging has been effective at promoting 'breast is best' and that all women can and should breastfeed their babies, but these discourses are often at odds with how women experience breastfeeding (Burns et al. 2010; Williamson et al. 2012). Health promotion discourses aimed at pregnant women promote the health benefits of breastmilk, bonding opportunities and the convenience of breastfeeding (Best Start Resource Centre 2014), but do not provide information about breastfeeding challenges and how these challenges are dealt with in health care settings. Research has hypothesized that it is this unbalanced view that contributes to the abrupt and stressful interpretation of the reality of breastfeeding that many women experience (Lavender et al. 2005).

One explanation for the disconnect between expectation and reality is misinformation, lack of information or poor delivery of information from providers of breastfeeding support (Burns et al. 2010; Hoddinott et al. 2012). Women report that breastfeeding education and support do not provide enough information about breastfeeding challenges and how these

challenges can be resolved. In Leurer and Misskey's (2015) study, the women felt that breastfeeding challenges needed to be normalized, which would help the women to anticipate them, make decisions regarding solutions and not feel like a failure at breastfeeding. Leurer and Misskey (2015) stated what should be obvious: for breastfeeding support to be effective it has to meet the needs of breastfeeding women. Taveras et al. (2004) found that, when comparing mothers' and clinicians' perspectives of breastfeeding support, gaps in perception were present and the mothers did not feel the support was aligned with the reality of breastfeeding. Leurer and Misskey (2015) advocated for health care providers to provide anticipatory guidance to reduce anxiety and support women in their breastfeeding practice. Preventable breastfeeding difficulties or lack of support often cause women to stop breastfeeding in the early postpartum period (Renfrew et al. 2012).

In February 2016 an open letter was issued by a group of prominent health care associations in the U.K. regarding, as they termed it, "the current crisis in breastfeeding in the U.K.". The letter acknowledged that, initiation rates are high but breastfeeding rates drop significantly in the following weeks and months. The group stated that the breastfeeding crisis is in fact a crisis of lack of support for those mothers who choose to breastfeed (Adams et al. 2016). The letter quoted Dr. Nigel Rollins who co-authored the Lancet Breastfeeding Report:

The success or failure of breastfeeding should not be seen solely as the responsibility of the woman. Her ability to breastfeed is very much shaped by the support and the environment in which she lives. There is a broader responsibility of governments and society to support women through policies and programmes in the community.

Adams et al. 2016

The authors of the letter noted that when there is a high level of breastfeeding promotion without support, mothers can feel frustrated, resentful and angry (Adams et al. 2016).

In recent years, governments and public health agencies have undertaken considerable effort to promote and support breastfeeding. In 2013, as part of the Healthy Kids Strategy, the Ontario Ministry of Health and Long Term Care presented a four part strategy to support breastfeeding. The Ministry committed to investing more than \$2.5 million to “help families give their infants a sound nutritional start” through: 1) enhanced breastfeeding support via Telehealth, a 24-hour telephone health service, 2) supporting hospitals and community centres to achieve Baby-Friendly Initiative designation through training, tools, guidance and resources, 3) support for targeted programs for mothers in populations that have lower breastfeeding rates, and 4) new resources for parents through websites and print material (Ontario Ministry of Health and Long Term Care 2013). In 2015 alone, Best Start, Ontario's Maternal Newborn and Early Child Development Resource Centre, issued seven brochures, launched two websites and an online course providing information, education and support for breastfeeding women and those who support them (Best Start Resource Centre 2016). The Ministry's Press Release (Ontario Ministry of Health and Long Term Care 2013) announcing enhanced breastfeeding supports quoted Jack Newman, a renowned breastfeeding expert:

Breastfeeding should almost always work. Almost all breastfeeding problems are preventable and if they are not prevented, they can be fixed. Unfortunately in Ontario today, mothers have significant difficulties with breastfeeding because they cannot get the best start from day one and they cannot always find help when they need it. The initiatives the Ontario government is announcing today will help moms get the support they need to breastfeed successfully.

In this context of political and governmental support, women can feel increased pressure to breastfeed, but the tension between the expectation that women will breastfeed and the reality of breastfeeding creates a challenging space for women to navigate. While promoting breastfeeding support at the structural level, this type of governmental support does not address

the quality of assistance and the impact the nature of support has on the women who use it (Adams et al. 2016).

Numerous systematic reviews have been conducted to study the benefits of breastfeeding support programs. These studies have found that Baby-Friendly practices (Hannula et al. 2008; Beake et al. 2012; Sinha et al. 2015), professional post-discharge support (Hannula et al. 2008) and a combination of professional and peer support (Hannula et al. 2008; Kaunonen et al. 2012; Sinha et al. 2015) are all effective in improving breastfeeding exclusivity and duration rates. A 2012 Cochrane Review concluded that all forms of extra support increased exclusive as well as any (partial) breastfeeding (Renfrew et al. 2012). The Review noted that postnatal support is most effective in settings with high initiation rates, face-to-face is the ideal delivery method and proactive rather than reactive services are most effective. Renfrew et al. (2012) also highlighted that support services need to be tailored to the needs of the population they serve and identified a lack of studies which explored women's views about breastfeeding support interventions.

A 2016 Canadian study examined the relationship between a negative experience with breastfeeding support and postpartum depression (Chaput et al.). The authors found that women who experienced breastfeeding difficulties and reported a negative experience with breastfeeding support had a higher risk of postpartum depression than women who had breastfeeding difficulties but did not report a negative experience with breastfeeding support. These findings highlight the importance of better understanding the impact of breastfeeding support on the women who receive it.

In light of research findings and recent governmental initiatives, which have increased public knowledge, provided resources and committed to major institutional reforms in hospitals

and community health facilities, this study provides insight into the medicalized and professionalized factors which are shaping contemporary breastfeeding support and how these factors impact women's breastfeeding experiences.

Contemporary Forces Influencing Breastfeeding Support

Introduction

This section examines the contemporary forces that are impacting breastfeeding support programs. Background information and a review of the existing literature on hospital practices, lactation consultants and pharmaceuticals used to support breastfeeding highlight the ways in which these forces can shape breastfeeding support.

Hospital Practices

Birth Interventions and Breastfeeding

This section provides background on the potential impacts of birth interventions on breastfeeding. As the vast majority of women in Ontario give birth in hospital and experience birth interventions, it is important to explore these contemporary birth practices and survey the literature on research on how medical interventions during labour and delivery can affect the mother and infant and their breastfeeding practice.

There have been moves over the last 30 years to demedicalize the childbirth experience in hospital, and while the type of practices and medications used have changed dramatically, the level of medicalization during childbirth remains high. Medical interventions used during labour and delivery, such as epidural, induction or augmentation and caesarian section, have transformed the birth experience and made 'normal birth' a rare event in a hospital setting

(O'Connell and Downe 2009). Critics assert that hospital birth, with its reliance on surveillance, technology and adherence to protocols, changes birth from a positive, life-affirming rite of passage to a dehumanized, mechanistic process (Coxon et al. 2014). In addition to changing the birth experience, these medical interventions can impact breastfeeding practice. Research on medicalized childbirth and its impact on breastfeeding often portray these interventions as short-sighted and illuminate a lack of consideration for their implications.

In the 19th and 20th centuries medical innovations, such as forceps, new forms of analgesia, anaesthesia, caesarian sections and safe blood transfusions made hospitals a much safer environment within which to birth (Johanson et al. 2002). In the early twentieth century obstetricians were working to establish their profession and promote medical birth. Comments from an obstetrician in the early 20th century illustrated that he “had difficulty attracting patients because women believed that childbirth was an event requiring little more specialized medical attention and treatment than breathing” (Abt 1944 in Wolf 2012:87). Despite a slow start, medical births prevailed; by the 1920s doctor-attended homebirths were the norm and by 1957, 90% of births in Canada took place in a hospital (Nathoo and Ostry 2009). Births in hospital, under the care of a doctor saved lives, but for the majority of uncomplicated births it transformed labour and delivery into a potentially difficult event in need of treatment rather than a normal physiological process (Wolf 2012).

A key issue with hospital births is the cascade of interventions which can occur. Many birth interventions have unintended effects, often these effects create new problems that are "solved" with further interventions, which may in turn create even more problems. Johanson et al. (2002) stated that obstetrician's dominance over normal births has led to women with uncomplicated pregnancies being subjected to multiple interventions, such as routine intravenous

infusions and oxytocin during labour. Coxon et al. (2014) also stated that when women with low risk pregnancies give birth in hospital they are more likely to experience medical interventions and surgical births.

Birth induction and augmentation rates are increasing in Canada as well as in most high income nations (Chalmers et al. 2010). The Canadian Institute for Health Information (CIHI) reported that in 2001 medical induction was approximately 20% in Canada (CIHI 2004); the Maternity Experiences Survey (2005-2006) reported a 44.8% induction rate for 2005-2006, which is an increase of 25% in just four years (Chalmers et al. 2010). Davey and King (2016) reported that all methods of labour induction and augmentation for women at term, with uncomplicated pregnancies, more than doubles the risk of emergency caesarian section. The use of oxytocin or Pitocin to induce or augment labour increases the pain the mother experiences and often leads to further interventions (Labbok 2012). Labour inducing or augmenting medications are typically delivered through intravenous infusions, which can augment an infant's birth weight and can produce inaccurate data potentially creating subsequent issues with breastfeeding (Chantry et al. 2011; Noel-Weiss et al. 2011).

The World Health Organization recommends that epidural, a medication administered through the spine to provide pain relief, be avoided for routine pain management (Amedee 2013), but it is the most common birth intervention used in Canada (Chalmers et al. 2010). Fifty-seven percent of respondents in the Maternity Experiences Survey used epidural or spinal anesthesia (Chalmers et al. 2010), up from 45.4% in 2002 (CIHI 2004). In 2015 CIHI reported an epidural rate of 65% for vaginal deliveries in Ontario. A 2016 Systematic Review reported that the relationship between labour epidural and breastfeeding is inconclusive (French et al.). The Review stated that while half of the included studies reported adverse effects of epidural

analgesia on breastfeeding, the remainder reported no effects (French et al 2016). The authors reported that epidural is associated with significantly higher rates of subsequent birth interventions and that a cascade of interventions may directly or indirectly impact breastfeeding (French et al. 2016). In addition, epidurals often can cause additional negative effects for the mother such as hormonal changes and increases in blood pressure and body temperature (Herrera-Gómez 2015). Epidural can also impact the infant as it crosses the placenta and can cause fetal distress, malposition or drowsiness (Herrera- Gómez 2015).

The rising caesarian section rates have garnered attention worldwide. In 2015 the World Health Organization (WHO) stated caesarean births should ideally only be undertaken when medically necessary with the ideal rate at 10-15% (Johanson et al. 2002). Caesarean section rates have steadily increased in Canada since the mid-1990s (CIHI 2004). In 2015 the caesarian rate for Ontario was 28% (CIHI 2015). Caesarian sections are major surgery and carry significant risks for both mother and infant, including increased chance of hemorrhage, longer recovery, severe pain and infection, and for babies increased risk of respiratory problems (CIHI 2004). In addition to surgical complications, caesarian sections impact maternal-infant contact at birth, maternal satisfaction with birth and have effects on breastfeeding (Chalmers et al. 2010).

The impact of birth interventions can continue after labour and delivery and can have a significant impact on breastfeeding initiation, exclusivity, duration and satisfaction. Birth interventions can upset the integral hormone feedback cascade which occurs during labour and delivery and which facilitates breastfeeding, the fourth stage of labour (Labbok 2012). In addition, pain from interventions or surgery can inhibit or complicate breastfeeding practice (Labbok 2012).

Numerous studies have explored the relationship between pain medications used during labor and delivery and suboptimal infant breastfeeding behaviour (Ransjo-Arvidson et al. 2001; Wiklund et al. 2009; Lind et al. 2014; Brimdyr et al. 2015). Brimdyr et al.'s (2015) study found that in utero exposure to the medications used to induce or augment labour and provide pain relief significantly decreased the likelihood of the infant breastfeeding immediately after birth. Epidural use during labour can lead to difficulty establishing breastfeeding because the infant is sleepy due to the anesthetization (Labbok 2012), which can lead to poor infant suckling ability, or poor latch which may not provide adequate stimulation of the breasts, which could potentially delay the onset of lactation (Lind et al. 2014).

Chalmers et al. (2010) reported that women who had a caesarean section were less likely to experience breastfeeding supportive practices such as holding their baby skin-to-skin after birth, and these mothers also reported that they spent too little time with their babies after birth. These early interruptions can have a cascade effect: women who experienced caesarian and vaginal birth initiated breastfeeding at similar rates, but mothers who had caesarian deliveries were more likely than women who gave birth vaginally to be offered free formula samples, to give their babies pacifiers, and to feed their babies according to a fixed feeding schedule (Chalmers et al. 2010). Subsequently, women who had caesarian deliveries had lower rates of exclusive and any breastfeeding at three and six months postpartum (Chalmers et al. 2010). The authors noted that lower rates of breastfeeding occur even though women who had caesarean sections stay in hospital longer postpartum, and therefore have more opportunities for health care providers to assist them with breastfeeding (Chalmers et al. 2010).

The Baby-Friendly Initiative (BFI)

This section provides background and a review of research on the Baby-Friendly Initiative. BFI practices were designed to reverse the medicalization of infant feeding in hospital, which flourished in the twentieth century, by replacing maternity care practices that have been labeled as harmful, such as strict feeding schedules, the separation of mother and baby and standard formula supplementation, with evidence-based practices that have demonstrated improved breastfeeding outcomes (Saadeh 2012; Schmied et al. 2014). Feeding schedules, separation and formula supplementation can reduce the breast stimulation needed to maintain adequate milk supply and/or reduce opportunities for mothers and babies to practice breastfeeding (WHO/UNICEF 2009a). This review of the existing literature provides insights into BFI successes, challenges and critiques.

BFI practices are intended to protect, promote and support breastfeeding while the mother is in the hospital and include immediate skin-to-skin contact, in-person support to initiate breastfeeding, promotion of cue-based breastfeeding, 24 hour rooming-in and only medically indicated use of pacifiers and formula (WHO/UNICEF 2009a). Additionally, hospitals and public health departments are required to have a written breastfeeding policy, require training for health care staff that work with pregnant women and mothers, provide prenatal breastfeeding education and post-discharge breastfeeding support services. These practices are the basis of the *Ten Steps to Successful Breastfeeding* (WHO/UNICEF 2009a). Adherence to the *Ten Steps to Successful Breastfeeding* and the *International Code of Marketing of Breastmilk Substitutes* (WHO/UNICEF1981) are required for Baby-Friendly Hospital Initiative (BFHI) designation. The BFHI, which was launched by the WHO/UNICEF in 1991, is called the Baby-Friendly Initiative (BFI) in Canada and is governed by the Breastfeeding Committee for Canada (BCC).

WHO 10 Steps to Successful Breastfeeding (1989): (BCC) Interpretation for Canadian Practice (2011)	
Step 1	Have a written breastfeeding policy that is routinely communicated to all health care providers and volunteers.
Step 2	Ensure all health care providers have the knowledge and skills necessary to implement the breastfeeding policy.
Step 3	Inform pregnant women and their families about the importance and process of breastfeeding.
Step 4	Place babies in uninterrupted skin-to-skin ¹ contact with their mothers immediately following birth for at least an hour or until completion of the first feeding or as long as the mother wishes: encourage mothers to recognize when their babies are ready to feed, offering help as needed.
Step 5	Assist mothers to breastfeed and maintain lactation should they face challenges including separation from their infants.
Step 6	Support mothers to exclusively breastfeed for the first six months, unless supplements are medically indicated.
Step 7	Facilitate 24 hour rooming-in for all mother-infant dyads: mothers and infants remain together.
Step 8	Encourage baby-led or cue-based breastfeeding. Encourage sustained breastfeeding beyond six months with appropriate introduction of complementary foods.
Step 9	Support mothers to feed and care for their breastfeeding babies without the use of artificial teats or pacifiers (dummies or soothers).
Step 10	Provide a seamless transition between the services provided by the hospital, community health services and peer support programs. Apply principles of Primary Health Care and Population Health to support the continuum of care and implement strategies that affect the broad determinants that will improve breastfeeding outcomes.

Adapted from BCC Integrated Ten Steps Practice Outcome Indicators May 2012

Approximately 98% of Ontario births occur in a hospital (Dunn et al. 2010), which places hospital breastfeeding support programs in a powerful position to have influence over the breastfeeding practices of new mothers. The BFI designation process, for a hospital, typically takes five years to complete (Breastfeeding Committee for Canada 2015). Ten measurable criteria, which are based on the Ten Steps, are used to determine if a hospital or community health service has achieved the required targets (Saadeh 2012). Designation is through an external audit process; the facility's documentation, procedures and practices are reviewed in a

pre-assessment phase and the on-site assessment includes interviews with staff and mothers who must confirm that outcomes are achieved at least 80% of the time (Breastfeeding Committee for Canada 2012).

As a result of the Healthy Kids Strategy, and the Ontario Ministry of Health and Long Term Care's campaign to support hospitals and community centres to achieve BFI designation, many hospitals and health care facilities have implemented BFI practices as they pursue designation (Breastfeeding Committee for Canada 2015). According to the BCC, the majority of Canadian hospitals have not yet achieved BFI designation. As of November 2015, 7 hospitals/birthing centres and 21 community health services have been BFI designated (excluding Quebec). The number of designated health care facilities is low across high income nations (Saadeh 2012). Globally, as of 2010, 21,328 hospitals and birthing centres in 160 countries have been designated, 31% of facilities in low income countries and 8.5% of facilities in high income countries (Perez-Escamilla et al. 2016).

While numerous studies found that breastfeeding rates increase in BFHI designated facilities, critics question the benefits of designation and the institutionalization of breastfeeding support. Barclay et al. (2012) acknowledged many positive contributions of BFHI, such as stopping the direct marketing of infant formula to women in hospital, but question the value for effort regarding breastfeeding duration rates. Sheehan et al. (2009) raised concerns about policies and practices which are applied rigidly and do not allow for individualization of support and care. A number of studies have noted that a standardized approach to care prevails in the face of time constraints, increased administrative duties, and the need to measure performance (Bilson and White 2004 in Sheehan et al. 2009; Choiniere 2011; Cricco-Lizza 2016). Barclay et al. (2012) posited that the structural and organizational reforms required for BFHI designation

might promote a reductionist approach and further discount the embodied nature of breastfeeding. The institutionalization of what is seen by some as a social process could be detrimental by replacing mother-to-mother learning and surrounding breastfeeding with rules that replace a woman's own wisdom and confidence (Nathoo and Ostry 2009; Barclay et al. 2012). The Baby-Friendly Initiative has also been critiqued as being 'Mother-Unfriendly' (Chalmers 2004; Schulte 2014). Immediate skin-to-skin contact, rooming-in and restricted access to pacifiers and formula shift many aspects of the infant care responsibilities from the hospital staff to the mothers (Chalmers 2004).

Of the surveyed research on hospital breastfeeding support programs, the results were mixed as to which specific practices were beneficial. Given that very few hospitals in high income nations are BFHI designated, many studies included facilities in the process of being designated in addition to BFHI designated facilities. Of the studies that analyzed the relationship between experiencing BFHI-type practices and breastfeeding outcomes, a number reported a dose-response relationship: breastfeeding duration or exclusivity increased as the number of BFHI Ten Steps experienced increased (Chien et al. 2007; DiGirolamo et al. 2008; Rosenberg et al. 2008; Brodribb et al. 2013). The increases in breastfeeding exclusivity or duration were found regardless of maternal characteristics, but the studies varied in their assessment of which steps were most impactful. For example, Nickel et al. (2013) found that exposure to six Steps resulted in the longest median breastfeeding duration of 48.8 weeks and that a lack of Step Six - non-medically indicated formula use - was associated with shorter breastfeeding duration.

A number of systematic reviews, syntheses' and literature reviews have been conducted to try to distill the results of research on the BFHI. In 2016, Perez-Escamilla et al. conducted a systematic review to investigate the impact of BFHI on breastfeeding and child health outcomes.

The authors found that adherence to the BFHI 10 Steps have a positive impact on breastfeeding outcomes (Perez-Escamilla et al. 2016). While the authors noted that none of the research included in their review suggests a negative impact of BFHI on breastfeeding, results often pointed to benefits in the very short term (initiation of breastfeeding) with the impact on longer term breastfeeding being unclear (Perez-Escamilla et al. 2016). Numerous studies reported that robust community-based breastfeeding support, as required by BFHI Step 10, is necessary to provide continued support and sustain short term breastfeeding gains made in hospital (Perez-Escamilla et al. 2016).

Murray et al. (2007) identified the top three reasons why the mothers in their study stopped breastfeeding, which were: “not producing enough milk”, “did not satisfy baby”, “had difficulty nursing”. On the surface these issues appear to be out of the jurisdiction of hospital breastfeeding support practices, but the authors propose that mothers who experience a combined five Steps (breastfeeding within the first hour, breastmilk only, rooming-in, no pacifier use and receipt of a telephone number for use after discharge) were supported in developing a good milk supply which is critical to head-off potential, subsequent breastfeeding issues.

Women are exposed to hospital breastfeeding support practices typically only for the first few days after birth. In Canada, on average, women stay in hospital for 2.3 days when giving birth; for caesarian sections only the average length of stay is 3.2 days (CIHI 2015). On the surface, hospital breastfeeding support practices may appear to only affect initiation rates, but, as the WHO has stated, without successful initiation, breastfeeding exclusivity and duration may not be possible: “Although inappropriate maternity care cannot be held solely responsible for low exclusive breast feeding rates, appropriate care may be a prerequisite for raising them” (WHO 1998 in Pincombe et al. 2006:56). The potential benefits of these practices diminish with

shorter hospital stays (Levitt et al. 2011). Additionally, Levitt et al. (2011) noted that shorter hospital stays may be behind the improved reported rates of breastfeeding at discharge. If women are discharged days earlier than they had been in the past, the actual rates of breastfeeding at a point-in-time postpartum may be lower. These factors lead to the findings of studies that identify the lack of postpartum support as a major issue to raising breastfeeding exclusivity and duration rates (Pincombe et al. 2006; Newell 2013).

With increased governmental support in Ontario, BFI and its required practices are driving major health policy and institutional reforms to “improve outcomes for mothers and babies by enhancing the quality of their care and enabling them to make informed decisions around infant feeding” (Breastfeeding Committee for Canada 2011:1). To date, the implementation of these practices has been uneven and not without critics. Research is needed into the impact of this contemporary health care reform on breastfeeding women, particularly in a Canadian context.

Formula and In Hospital Supplementation

In this section I explore the literature on formula use and hospital practices that include health care provider supplementation and infant care protocols. The literature points to conflicting discourses and practices regarding the use of formula. Formula is portrayed as harmful, yet is frequently used by health care providers in hospital. Studies also illustrate the conflict between breastfeeding promotion and existing infant care protocols. Sociological research provides insight into how infant feeding is socially constructed in the hospital.

Infant formula is often portrayed as harmful to babies in health promotion discourses (Braumoh and Davies 2014). Websites, pamphlets, posters and brochures aimed at pregnant

women and mothers contain detailed information about the benefits of breastfeeding and often also detail the risks of using formula. Statements such as “I didn’t breastfeed my children. I wish I had known that breastfed babies are less likely to die from Sudden Infant Death Syndrome (SIDS)” (Best Start Resource Centre 2015:4) imply that formula fed babies are at a higher risk for health problems. Explicit statements, such as: “Formula fed infants are more at risk for: infections such as ear, chest and bladder infections; upsets of the stomach and gut, causing diarrhea or later bowel problems; Sudden Infant Death Syndrome (SIDS); obesity and chronic diseases later in life; some childhood cancers” (Best Start Resource Centre 2014:7) portray infant formula as a dangerous, harmful product. A brochure promoting exclusive breastfeeding portrays infant formula as something to be rigorously avoided: “If at all possible, try to avoid giving your baby formula... if you absolutely have to give formula...” (..... n.d.)¹. Health promotion literature often warns of the ill effects of formula which can be produced from very little exposure: “For newborns, providing any supplementation disrupts a major benefit of breastfeeding – the development of immunological mechanisms through intake of the mother’s colostrum” (Texas Ten Step Program 2016:91).

These statements about infant formula are presented alongside statements about the benefits of breastmilk: “Breastmilk is the natural food for newborns. It contains everything your baby needs. No question, no debate, no doubt” (Best Start Resource Centre 2014:3). “Breastfeeding is the normal and unequalled method of feeding infants” (Health Canada 2015a). In this environment, increasingly Canadian women are planning to breastfeed with the majority intending to exclusively breastfeed (Health Canada 2012). Braimoh and Davies (2014) noted that

¹ All references to the name of the region where the study was conducted have been omitted.

mothers deem breastfeeding to be successful when it is exclusive and formula supplementation is not required or used.

The characterization that formula is harmful is based on results from research on the adverse effects of formula feeding on infant health and on the success of continued breastfeeding (Ogawa et al. 2002; Gagnon et al. 2005; Madan et al. 2016). In a small U.S. study, Madan et al. (2016) observed associations between the composition of the gut microbiome and delivery and feeding modes and found infants who were fed a diet of both formula and breastmilk had a stool microbiome similar to that of infants who were exclusively formula fed. Ogawa et al. (2002) found that infant formula changes the gut flora in breastfed babies by breaking down the mucosal barrier that colostrum provides. In addition, studies show that infants who receive formula in hospital have shorter breastfeeding durations and are less likely to be exclusively breastfed (Nickel et al. 2013). This research informs health promotion literature and is a critical component of the formation of BFHI Step Six (no formula supplementation) and the *International Code of Marketing of Breast-milk Substitutes* (WHO/UNICEF1981).

Numerous studies in recent years have looked at the impact of hospital supplementation on breastfeeding, particularly its impact when the mother intends to exclusively breastfeed (Declercq et al. 2009; Perrine et al. 2012; Nickel et al. 2013). These studies report that in-hospital supplementation has a significant, negative impact on breastfeeding exclusivity and duration (Semenic et al. 2008; Biro et al. 2011; Perrine et al. 2012). Perrine et al. stated that “the primary hospital practice associated with women not achieving their exclusive breastfeeding intention was infants receiving non–breast milk feedings” (2012:57). Chantry et al. (2014) reported in-hospital formula supplementation was associated with nearly double the risk of not fully breastfeeding between days 30-60 and triple the risk of breastfeeding cessation by day 60

for mothers intending to breastfeed exclusively. These particular studies make important contributions to the literature by focusing on mothers who intend to exclusively breastfeed. Chantry et al. (2014) noted, by focusing on mothers who intend to breastfeed exclusively, their study “provides stronger evidence that in-hospital formula supplementation is not simply a marker for less motivation to breastfeed” (2014:1344). Perrine et al. (2012) acknowledged the importance of supporting women’s desires to exclusively breastfeed and argued that while short (typically 2 days), the time in hospital is crucial for mothers and affects breastfeeding practice long after hospital discharge.

Adherence to the International Code of Marketing of Breast-milk Substitutes

(WHO/UNICEF1981) requires that hospitals and health care facilities limit inappropriate marketing of formula. BFHI designated facilities and those in the process of seeking designation have done much work to restrict mother’s access to formula supplementation and to reduce exposure to formula advertising and marketing in hospitals (Brimoh and Davies 2014). Prior to BFHI it was routine practice to supplement babies for a variety of reasons – mother’s fatigue or distress, convenience or mother’s request (Cricco-Lizza 2009) and mothers often received formula in branded bottles and also received promotional gifts from formula companies that include free formula samples (Texas Ten Step Program 2016). Implementing Step Six and adhering to the Code for a hospital or health care facility requires a major shift in procedures regarding formula supplementation (Nickel et al. 2013).

Hospitals in Canada who are pursuing BFI designation must implement practices to meet the requirements of Step Six of the *Ten Steps to Successful Breastfeeding* which states: “Give newborns no food or drink other than breastmilk, unless medically indicated” (WHO/UNICEF 2009a:36) . Therefore, while in hospital, babies are to receive no supplementary feedings, no

food, fluids or nutrients other than breastmilk, with the exception of vitamins, minerals and medications that have been prescribed for medical reasons (WHO/UNICEF 2009a). Medically indicated supplementation as defined by BFI states that it is acceptable for babies to receive formula for specific, documented medical conditions, such as classic galactosemia, maple syrup urine disease, phenylketonuria and for temporary conditions, such as very low birth weight, born <32 weeks gestation, at risk for impaired metabolic hypoglycemia, significant weight loss, clinical indications of insufficient milk intake (Breastfeeding Committee for Canada 2012). This guidance is based on the WHO/UNICEF's (2009b) *Acceptable Medical Reasons for Use of Breast-milk Substitutes*. If formula supplementation is given to an infant in a health care facility, for medically indicated reasons, under BFI it must be documented in the baby's chart (Breastfeeding Committee for Canada 2012). In a BFI designated facility, if a mother requests formula for her baby, she must be informed of the risks of infant formula and must sign a consent form. For a hospital to receive BFI designation, it must be able to provide documentation that its exclusive breastfeeding rate from birth to discharge is at a minimum of 75% (Breastfeeding Committee for Canada 2012). Hospitals and birthing centres are permitted to deduct the medically indicated supplementations from the exclusive breastfeeding rate (Breastfeeding Committee for Canada 2012). Therefore, there is no cap on the percent of medically indicated supplementation and reported exclusive rates are not actually 75% but rather a composite of exclusive breastfeeding and medically indicated supplementation. Rates for medically indicated supplementation in designated facilities are not published.

Only a small percent of hospitals and health care facilities in high income nations have received BFI designation and for those who have, it is a relatively new status, therefore there is very little research to date which has explored the implications of restricted formula

supplementation and the BFI “medically indicated” provision. Reddin et al. noted in their study that “the loophole of medically indicated use in special care nurseries appears to be used to justify the use of formula for the convenience of staff as much as for the benefit of the baby” (2007:75). Reddin et al. (2007) further observed that the term ‘medically indicated’ was regularly used to “justify” feeding a baby formula. The authors stated that while medically indicated supplementation may be necessary in many circumstances: “there were equally many occasions where participants reported that the use of formula was not only unnecessary but that the mothers had indicated that they did not want their babies to be given formula feeds” (2007:75).

Transitioning a health care facility towards BFI designation is often met with challenges. One particularly challenging area is existing infant care protocols which identify formula supplementation as a remedy for issues such as hyperbilirubinemia (jaundice), hypoglycemia (low blood sugar) and infant weight loss. Sundercombe et al. (2014) found that the majority of neonatal hypoglycemia guidelines that they reviewed did not adhere sufficiently to UNICEF UK BFHI recommendations to facilitate breastfeeding. The authors caution about the overuse of these protocols: “Clinical guidelines need to balance harms and benefits of hypoglycemia screening to prevent a rare but devastating event whilst minimising over-intervention in healthy babies.” (2014:1) Grossman et al. (2012) observed in their study that there is no one standard for normal neonatal weight loss and guidelines can vary from 7% to 10% and often do not address timing of weight loss, nor do they take into account other factors that can affect infant weight loss, such as type of delivery or maternal fluids in labor. The first recommendation in the Canadian Paediatric Society’s new Hyperbilirubinemia (Jaundice) Guideline states that a breastfeeding support program should be implemented in all facilities where babies are born and

that formula supplementation should only be used for severe hyperbilirubinemia, after phototherapy (Canadian Paediatric Society 2016). There are numerous studies addressing the impact of maternal fluids in labour and infant fluid retention (Lamp and Macke 2010; Noel-Weiss et al. 2011; Chantry et al. 2011). Excessive infant weight loss is a medically indicated reason to provide formula supplementation. Recent research has focused on the increasing incidence of intravenous fluid use during labour and the impact of maternal intravenous fluid transfer to infants. Chantry et al. (2011) found that infants can retain extra fluids that the mother receives intravenously during labour which can produce inaccurate birth weight readings for the infant. When the baby expels these retained fluids their birth weight can drop below the prescribed limit for neonatal weight loss and often these babies receive formula supplementation as a result (Noel-Weiss et al. 2011). While research has identified breastmilk as the ideal route to resolve issues such as jaundice and low blood sugar, and that babies whose mothers have had prolonged intravenous fluids may have inaccurate birth weights, many existing hospital protocols recommend formula supplementation, not breastfeeding as a remedy (Noel-Weiss et al. 2011; Sundercombe et al. 2014; Canadian Paediatric Society 2016).

Outdated protocols are not the only obstacle to limiting formula use in hospital. Supporting breastfeeding to resolve medically indicated conditions is much more time consuming and labour intensive than using formula. Cricco-Lizza (2016) identified a common theme among maternity and neonatal intensive care unit nurses who, due to staff shortages and increased administrative responsibilities, often felt they did not have the time to spend with a mother to attempt to resolve issues with breastfeeding. A nurse commented: “It took me a good hour and a half to work with that mom one-on-one [to breastfeed]. To give a bottle takes 15 minutes” (Cricco-Lizza 2016:94).

In addition, nurses and doctors receive little to no breastfeeding training during their education (Nathoo and Ostry 2009; Semenic et al. 2012). The BFI Step Two requires all staff receive breastfeeding education, but these 20 hours of training are sometimes not enough to change entrenched attitudes and practices (Nickel et al. 2013). Cricco-Lizza (2016) observed that nurses who had not received or were not interested in breastfeeding education often overlooked opportunities to promote breastfeeding and would prefer to provide a bottle than encourage feeding at the breast. The pursuit of BFI designation puts hospital staff in a challenging position; they are required to promote and support breastfeeding when time constraints, coupled with their knowledge, experience or personal comfort level may not align with these new responsibilities. “We really have grown, but there is still a sense that breast milk is like yucky stuff, you know, when you’re dealing with somebody’s body fluid, and that formula somehow is cleaner” (Cricco-Lizza 2016:95).

Braimoh and Davies (2014) noted that in their study, the decision to supplement with formula was predominately driven by health care providers, not mothers. While there are numerous situations where medical formula supplementation is necessary, particularly for very premature or ill babies, research cautions against the misuse and over-use of this provision and the implications of this practice on a woman’s subsequent breastfeeding practice. Formula supplementation under the medical indication provision can create a complicated and distressing situation for breastfeeding women, particularly those who intend to exclusively breastfeed. Formula supplementation because a woman has decided it is right for her and her family can create feelings of empowerment and control, but medically indicated supplementation can cause unnecessary concern for a mother and also cause her to doubt the ability of her breastfeeding practice to keep her baby healthy (Braimoh and Davies 2014). Often the medically indicated

provision is applied to a healthy baby, either because of an out-dated protocol or health care provider's judgement (Reddin et al. 2007; Cricco-Lizza 2016), which can have serious implication on the woman's breastfeeding practice. Breastfeeding mothers can experience formula use in hospital as failure or evidence of inadequacy in mothering (Brimoh and Davies 2014). For women who want to breastfeed, this perceived failure often translates into feelings of disappointment, failure, frustration, anxiety and even shame (Avishai 2007; Larsen and Kronborg 2013; Niela-Vilen 2015). A number of studies have explored the factors which attribute to maternal confidence and the impact of a mother's confidence on her breastfeeding practice (Dennis 2003; 2006; Semenic et al. 2008). In their study of mother's postpartum constructions of infant feeding in the hospital, Brimoh and Davies stated that their findings suggest "that women do not understand formula as a strategy towards accomplishing 'breast is best' because it disrupts their desired experience of motherhood" (2014:87). This type of formula supplementation is viewed as contradictory; in the health care context breastfeeding is organized as a natural act, but then formula is given to achieve optimal infant health (Brimoh and Davies 2014).

Medically indicated formula supplementation as a practice appears very paradoxical when considered in the context of scientific research studies, health promotion and public discourses about the unequalled value of breast milk and the health risks associated with formula use. This conflict of discourse and practice is confounded by the fact that for the majority of medical conditions for which babies receive supplementation in hospital, birth and hospital practices may have created the condition (Ransjo-Arvidson et al. 2001; Wiklund et al. 2009; Chantry et al. 2011; Noel-Weiss et al. 2011; Lind et al. 2014; Brimdyr et al. 2015) and often the evidence supports breastfeeding as the optimal route to resolution (Sundercombe et al. 2014;

Canadian Paediatric Society 2016). Currently, there exists a gap in the research on the impact of in-hospital supplementation on the breastfeeding experience of women who intend to exclusively breastfeed. With the political support behind BFI in Ontario and the increasing number of hospitals which are seeking BFI designation, research in this area is much needed.

The Lactation Consultant Profession

An International Board Certified Lactation Consultant (IBCLC) is a health care professional who specializes in the clinical management of breastfeeding (ILCA 2016). The International Board of Lactation Consultant Examiners (IBLCE), the accrediting body for IBCLCs, was formed in 1985 with support from the La Leche League. The history page of the La Leche League website states: “factors of consumer demand, scientific evidence and practical clinical skills converged to create an ideal climate for the new profession” (IBCLE 2016). Recent literature has explored the growth in the lactation consultant profession and its impact on breastfeeding support. Studies have found that a medical, professional approach can conflict with the lactation consultant’s original goal to support breastfeeding and demedicalized infant feeding.

The lactation consultant profession finds its roots in the La Leche League. The La Leche League, a prominent founding breastfeeding support organization, began in 1956, when seven women in Illinois, U.S.A. wanted to breastfeed their babies but found little support available. La Leche League’s values and vision now promote a medical and scientific view of breastfeeding more than the relational perspective which was prominent in the early days of the organization. The organization’s website, states on the *About La Leche League Canada* webpage that the La Leche League Canada (LLLC) is “an acknowledged expert in breastfeeding” and, “is a

complementary adjunct to the health care system, valued by the health care system and society” (La Leche League Canada 2016a). Torres (2014) argued that while the La Leche League and lactation consultants support and promote breastfeeding, they are also complicit in its medicalization. This complicity partially stems from the fact that lactation consultants have worked to be incorporated into the medical maternity care system and position themselves as professionals who are specialists in lactation (Torres 2013). The current position of lactation consultants contrasts with the profession’s origins as a resource to provide education about breastfeeding, support women in breastfeeding and to move women away from a heavy reliance on formula, which was the cultural norm at the time (Torres 2015).

In the past thirty years, the lactation consultant profession has grown to almost thirty thousand board certified lactation consultants globally (IBLCE 2016). Lactation consultants have “carved out a niche as an emergent professional specialty and are increasingly influential in the lives of mothers and babies” (Carroll and Reiger 2005:101). Avishai (2007) tied this growth to the lack of family and community supports available to contemporary mothers. For the majority of women giving birth today, their mothers fed them formula as babies, as recommended by doctors at the time, therefore, few of their mothers or aunts have personal experience with breastfeeding (Avishai 2007; Nathoo and Ostry 2009). In addition, doctors and nurses receive very little, if any, clinical training in breastfeeding and often refer mothers, in hospital or in the community, to lactation consultants (Torres 2014). The gaps in informal and formal breastfeeding support, coupled with an increasing societal reliance on experts, have created an ideal environment for the lactation profession to flourish (Avishai 2007).

Research also draws attention to the organization of hospitals and health care institutions and the fragmented nature of services provided in the health care system (Schmied et al. 2011;

Barclay et al. 2012). Lactation consultants position themselves to fill this gap in breastfeeding support. Torres (2015) questioned the implications of filling this gap with a new occupation rather than restructuring the maternity care system to allow existing health care professionals to provide adequate breastfeeding support. Schmied et al. (2011) hypothesized that the rise in lactation consultants is in response to these structural issues that disadvantage both women and hospital staff when it comes to breastfeeding. Barclay et al. (2012) argued that structural and professional reform might have the effect of diminishing self-reliance and excluding social peers who might be very helpful to breastfeeding women. The professionalized approach provided by lactation consultants may be counterproductive to increasing a woman's confidence in her ability to breastfeed (Barclay et al. 2012). The concern behind this professionalization is that experts have co-opted breastfeeding, which is an emotional and social relationship, and have made it into a challenging, technical endeavor (Nathoo and Ostry 2009; Barclay et al. 2012).

The majority of certified lactation consultants come from the nursing profession (Nathoo and Ostry 2009). In Waggoner's (2011) study of lactation consultants in the U.S., 18 of the 20 participants were nurses prior to becoming lactation consultants. Initially, this clinical management of breastfeeding was focused on mother and baby dyads with diagnosed medical issues which could affect breastfeeding, such as cleft palate, tongue tie, issues from breast surgery, or unique cases such as premature babies or multiple births (Barclay et al. 2012), but the role has been greatly expanded through lactation consultants' own promotion and demands from women (Torres 2014). Critics warn that this professional and medical involvement in breastfeeding has effectively "deskilled" mothers, removing practical knowledge and confidence necessary for successful breastfeeding (Nathoo and Ostry 2009). Palmer and Kemp state: "the

very existence of a ‘professional’ supporter motivates the expectation from clients for the mystique of complex information” (1996:12).

The IBCLC and IBCLCs have worked hard to legitimize their profession and to be recognized as allied health professionals. They advertise themselves as experts in the clinical management of breastfeeding (ILCA 2016). The process to become a lactation consultant is lengthy and regarded as rigorous (Torres 2014). A candidate must complete a certification process that includes higher education in health sciences, 1,000 clinical hours of breastfeeding support, 90 hours of lactation specific education and successful completion of a board administered exam (IBLCE 2016). Carroll and Reiger (2005) stated that lactation consultants use their accreditation and certification process to enhance their status and legitimacy in the health care field. Barclay et al. (2012) questioned if a culture of examination and credentials has contributed to the idea that breastfeeding is technically challenging and too difficult to do without professional help. The authors noted that this perception is reflected in women’s anticipation that breastfeeding is going to be problematic (Barclay et al. 2012).

Increasingly, women who experience no issues or minor issues request a consult with a lactation consultant in hospital, visit a lactation consultant at an out-patient clinic or hire a private lactation consultant (Barclay et al. 2012). Undoubtedly, lactation consultants are a vital resource for some breastfeeding mothers. Their expert knowledge is essential for women who deal with extremely difficult or painful breastfeeding or who encounter potentially life-threatening conditions for their babies (Avishai 2007). However, some researchers are concerned that the increasing prevalence of lactation consultants and their involvement in normal or mildly challenging breastfeeding professionalizes breastfeeding support and contributes to the pathologizing of breastfeeding (Torres 2014).

In their role as clinical breastfeeding managers, lactation consultants have access to and use a variety of medical technologies, such as lactation aids, nipple shields, breast pumps or formula. They are often the only staff who can provide these technologies and act as gatekeepers and experts regarding how to use these technologies (Torres 2014). A lactation aid is a device which consists of a bottle and a thin tube that is taped to the mother's breast and delivers formula to the baby while the baby is breastfeeding. A lactation aid is viewed as a superior way to supplement because it does not use a bottle with an artificial nipple, which has been found to interfere with breastfeeding. A nipple shield is a flexible, silicon nipple which is placed over the mother's nipple during breastfeeding. *Breastfeeding Matters* (2014), a 42 page guide for breastfeeding women and their families, published by the Best Start Resource Centre and the Government of Ontario, provides comprehensive information about breastfeeding, but has no mention of the fact that women may need to use a lactation aid, nipple shield, pharmaceuticals or formula to support breastfeeding. Torres (2014) argued that these devices medicalize breastfeeding and can be alienating for women by placing a barrier between them and what they perceive as a natural process.

The reliance on expert knowledge and professional advice is pervasive in modern society. Torres (2015) argued that this growing reliance undermines a women's confidence in her ability to breastfeed her baby without the help of an expert. A number of scholars have noted that working with a lactation consultant can have varied results as often expert assistance creates anxieties among new mothers (Avishai 2007; Waggoner 2011). Lactation consultants conduct key monitoring and surveillance during the crucial period of early motherhood (Waggoner 2011). Breastfeeding practiced under medical surveillance and control becomes constructed as an abnormal activity which is prone to fail (Torres 2014).

There is little research into the professionalization of breastfeeding support and the work of lactation consultants, with even less research into the impact of this type of support on breastfeeding women and how it can shape motherhood (Waggoner 2011). Barclay et al. (2012) analyzed national data for Australia over a 10 year period and found that the increase in professionalization of support did not translate to an increase in breastfeeding duration for Australian mothers.

Pharmaceutical Use to Support Breastfeeding

The following section explores the use of pharmaceuticals, particularly Domperidone, as an intervention to support breastfeeding. Increasingly breastfeeding issues, such as perceived or actual low breastmilk supply are being pathologized. These medical approaches dovetail with women's desire to exclusively breastfeed and identify as a breastfeeding mother and contribute to the medicalization of breastfeeding and breastfeeding support.

Aligning with health promotion and public discourses, Canadian women place a high value on breastfeeding (Best Start Resource Centre 2014). Exclusive breastfeeding is seen as the "gold standard" with government and health agencies advocating that babies be exclusively breastfed for the first six months of life (Health Canada 2012). Increasingly, mothers are expending great effort to breastfeed their babies and these efforts are increasingly medicalized. In addition, the growing impact of BFI practices and widespread knowledge about and support for breastfeeding has impacted formula use. As discussed previously, formula has been characterized as a harmful product which should be avoided at all costs. Wanting to avoid formula, women are turning to pharmaceutical measures to increase breastmilk supply and support continued breastfeeding (Mannion and Mansell 2012; Grzeskowiak et al. 2013).

Galactogogues are substances, herbal or pharmaceutical, which increase breastmilk volume by augmenting the rate of milk production (Sim et al. 2015). Galactogogues have historically been prescribed for re-lactation, inducing lactation for adoptive mothers and mothers of babies in the neonatal intensive care unit, but increasingly are being prescribed to mothers of healthy, full-term babies (Paul et al. 2015). In Canada, Domperidone, a gastrointestinal motility drug, currently prescribed off-label, is the most common pharmaceutical used to increase milk production (Mannion and Mansell 2012). Health Canada approved this drug for symptoms of intestinal problems and to counter effects of some Parkinson's drugs, and acknowledges that individual doctors prescribe it to stimulate milk production (CBC News 2012). In 2015 Health Canada reissued a health advisory on the risks of using Domperidone. The advisory was based on the results of two studies reporting abnormal heart rhythms and sudden cardiac death from the use of Domperidone (Health Canada 2015b). Proponents of Domperidone use for increasing breastmilk production argue that the studies looked at high doses delivered intravenously as opposed to a low oral dose which is what is prescribed for breastfeeding women (Bozzo et al. 2012; Grzeskowiak et al. 2013). Domperidone is not FDA approved in the U.S. for any use and is not currently approved as a galactogogue in any country (Wan et al. 2008 in Paul et al. 2015).

There existed very little research on the use of Domperidone as a galactogogue until recently. Osadchy et al. conducted a Systematic Review and Meta-Analysis in 2012 and concluded that Domperidone produced a significant increase in breastmilk production with no adverse effects for mother or infant. Paul et al.'s 2015 Systematic Review was more conservative stating that there was insufficient data to conclude on Domperidone's efficacy and they cautioned against Domperidone use as a galactogogue.

Off-label use of Domperidone as a galactagogue is increasing (Mannion and Mansell 2012; Grzeskowiak et al. 2013). In an Australian study, dispensing of Domperidone increased from .5% in 2000 to 5% in 2010, with 60% of the women receiving the prescription not being assessed by a lactation consultant prior to receipt (Grzeskowiak et al. 2013). In addition, a number of studies noted anecdotally that health care professionals are prescribing pharmaceuticals for mothers who present with perceived rather than actual low breastmilk supply (Jones and Breward 2011; Mannion and Mansell 2012; Sim et al. 2015).

Perceived or actual low breastmilk supply is often reported as the most common reason for breastfeeding cessation (Jones and Breward 2011; Mannion and Mansell 2012; Sim et al. 2015). Studies have shown that there is a strong correlation between maternal confidence, self-efficacy and perceived low breastmilk supply (Jones and Breward 2011; Mannion and Mansell 2012; Sim et al. 2015). Mannion and Mansell (2012) stated that maternal perception of insufficient milk production is almost never validated by measured milk volume. Their study of breastfeeding women in Calgary, Alberta found that women who had confidence in their ability to breastfeed also had high perceived milk production scores, conversely women who reported lower breastfeeding confidence frequently used both formula and Domperidone (Mannion and Mansell 2012). Domperidone use was reported by 28% of their study participants and the authors hypothesized that this increase in pharmaceutical use may indicate acceptance of a “ready fix” by physicians for anxious mothers (Riodan 2004 in Mannion and Mansell 2012).

Research reports that approximately 75% of breastfeeding women take medications, some of which may enter into their breastmilk, which carries a potential risk of toxicity to their baby (The Hospital for Sick Children 2016). To date, there is very little research on drug safety during breastfeeding and how medications are transported through breastmilk is poorly

understood because pharmaceutical companies cannot conduct trials on breastfeeding women (Babcock 2015). During pregnancy women are warned about the potential harms of certain foods, alcohol, smoking and medications and the majority of these warnings continue for women who breastfeed (Public Health Agency of Canada 2012).

The research surveyed provides insight into the use of pharmaceuticals to support breastfeeding and the potential impacts of this practice on women, their babies and their breastfeeding practice. There is very little sociological scholarship on the use of Domperidone and other galactogogues and their impact on women's breastfeeding experience. Torres (2014) highlights concerns around pathologizing lactating bodies and increased reliance on medical technology to facilitate breastfeeding.

Conclusion

Numerous factors are influencing breastfeeding support, which in turn impact breastfeeding women. Research to date on these topics has been primarily quantitative exploring causal relationships between factors and breastfeeding rates, or the efficacy of an intervention or program design. A few sociological studies have explored the impact of lactation consultants and the professionalization of breastfeeding support. Although these existing studies, surveyed above, offer valuable information about aspects of breastfeeding support, a review of multiple factors which influence contemporary support could provide more detailed insight into women's experiences with breastfeeding support. This study's research methods are addressed in the following chapter.

Chapter Four: Methods

Introduction

This chapter provides a description of the research design, methods and procedures that were utilized in the present study under the following sections: 1) methodological orientation 2) recruitment; 4) participant selection and sample; 5) data collection; 6) characteristics of participants; 7) analysis; and 8) challenges.

Methodological Orientation

This research used a mixed-methods study design where both quantitative and qualitative data were collected simultaneously and mixed during the analysis phase of the study. The quantitative data regarding the participant's experiences with breastfeeding and breastfeeding support programs in hospital and in the community was collected through a survey. A group of participants also took part in semi-structured, in-depth qualitative interviews to provide detail and context regarding how they experienced breastfeeding and supports both in hospital and post-discharge. In addition, regional statistics on birth and breastfeeding practices were used in the analysis of survey and interview data.

Mixed Methods

This study utilized a mixed methods approach. Mixed methods are becoming increasingly common in the social sciences and support an interdisciplinary approach to research. I chose this design based on my initial review of the literature. Current research appears to be fragmented on the impact of breastfeeding support – from a medical perspective, numerous quantitative studies attempt to analyze breastfeeding practice from a macro level often using survey data from large

databases, and conversely, sociological and anthropological research often employ strictly qualitative methods and focus on women's interpretations of their experience. The goal of using a mixed methods approach is to provide greater explanatory power than a single approach by capturing both statistical patterns and subjective qualitative experiences (Rubin and Rubin 2005 in Read and Gorman 2010). By employing mixed methods I have extracted the statistical benefits of quantitative results and the contextualized insights of qualitative findings with the goal of drawing conclusions from a synthesis of the data, resulting in a broader perspective of the impact of contemporary breastfeeding support programs (Ulin, Robinson and Tolley 2005). Breastfeeding practice is complex with many interrelated factors effecting outcomes. There are both structural aspects and subjective meanings to breastfeeding practice. Olsen stated: "The resulting dialectic of learning thrives on the contrasts between what seems self-evident in interviews, what seems to underlie the lay discourses, what appears to be generally true in surveys and what differences arise when comparing all these with official interpretations of the same thing" (2004:4).

While the survey results provide statistical data regarding breastfeeding intentions, confidence, hospital practices, breastfeeding difficulties, post-discharge support program usage and formula use, the interview data provide insight into the women's experiences with breastfeeding support programs, health care providers and hospital policies and practices. Perry stated that "mixed methods research is committed to assessing the interplay between human agency and systemic structures, and centers the tensions and contradictions of our lived experiences in their assessment of social and behavioural realities (2009 in Pearce 2012:833). My goal with using this methodology is to have the interview results not merely validate the

survey results but deepen and widen the understanding of the effects of breastfeeding support programs on breastfeeding practices.

Recruitment

This study was conducted in a large urban region in Southern Ontario. The regional focus of the study was to provide a comprehensive perspective of hospital and community breastfeeding support available to women in this region. I recruited at private mother and baby fitness classes and also partnered with the regional public health department to recruit some participants for the study. The health department reviewed and approved the study proposal, facilitated access to regional mother and baby programs and guidance regarding additional recruitment sources in the region.

I presented this research project and recruited participants at 13 classes/meetings for a total of approximately 80 women. I obtained initial agreement to participate and contact information from 58 women. Five women did not respond to contact requests; two did not understand the inclusion criteria and were deemed ineligible at the time of survey or interview completion. The final sample for the study was 51 participants.

I recruited for this study at a number of different programs with the goal to obtain a diverse sample. I recruited at two different private mother and baby fitness classes and varied regional and provincial mother and baby programs, including Healthy Start and Ontario Early Years Centres. To commence the recruit, I contacted the mother and baby fitness class companies in the region via email and asked if I could attend a session and recruit participants for the study. I also worked through contacts at the regional public health department to recruit at

the regional programs for new mothers and to connect with the facilitators of the provincial resource.

For all recruitment events, I attended a weekly meeting of the class or group and provided the group with a brief description of the study and asked if the women were interested in participating. If the women were interested in participating, they completed forms which collected their name, phone number, email address and consent for the collection of their personal information. The women were contacted by phone to set up the interviews and sent confirmation emails for the interviews.

Surveys were completed one of two ways: I attended a weekly meeting of the class or group and provided the group with a brief description of the study and asked if the women were interested in participating. Depending on the nature of the group meeting and if the facilitator or instructor allowed, the women would either complete the survey at the time or complete the contact information form used for interview participants and I contacted them at a later date and completed the survey over the phone. All participants were reimbursed with a \$10 gift card to a chain department store.

Participant Selection and Sample

Participants were selected through convenience sampling. The sample consisted of 51 English-speaking women, each of whom gave birth to a “healthy”, full-term, singleton baby in a hospital and who initiated breastfeeding. My initial recruitment plan specified that babies be between six weeks and 12 months of age at the time of the interview/survey, but I subsequently included mothers of babies as young as 4 weeks of age due to data collection scheduling restraints. Forty-one women completed the survey and 10 women participated in interviews.

One of the goals of the sampling was to obtain a sample with participants who had given birth at all of the hospitals located in the region. In addition, the various recruitment sites were selected with the goal to obtain a sample with different postnatal experiences and different social, cultural and economic positions. Women choose to access varied resources to assist with adaptation to motherhood; the recruitment sites represent different types of support available to postpartum mothers and provide a cross-section of maternal experiences.

Ethics

This study was approved by both the Human Participants Review Sub-Committee of York University's Ethics Review Board (Appendix A) and the Region's Public Health Research Review Committee (Appendix A) and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines. All information supplied by participants was held in confidence in a locked facility and computer files were stored on a password protected computer.

Data Collection

Instrumentation

Two instruments were developed for this study, a qualitative in-depth interview guide (Appendix B), and a quantitative survey (Appendix C). Both instruments were pre-tested for ease of use and comprehension by four volunteer mothers and reviewed by two graduate faculty members. The instruments were revised based on feedback and the final versions of both were used for data collection.

Interviews

The aim of the interviews was to discover the perceptions, feelings and thoughts of the participants as they experienced and used breastfeeding support, both in hospital and in the community setting, to determine what factors enhanced or impeded their knowledge, confidence and satisfaction with breastfeeding. The interview component of the study provides data to further illuminate the survey results. The interviews were designed to illustrate how the participants interpreted and experienced the breastfeeding support programs.

Using the interview guide I conducted the interviews following basically the same format each time. The semi-structured nature of the guide allowed interviews to flow naturally and emphasize areas that the participants highlighted. Following demographic questions; the women were asked to tell their birth story and then were asked about their experiences in hospital and, with post-discharge support services and their breastfeeding experience in general.

The interview guide was developed to allow the interviews to follow an iterative process. The open-ended nature of the guide allowed me to inquire about topics and ask questions which were raised in previous interviews.

The interviews were completed between September and December 2015. Each interview was completed at the time and place of the participant's choosing. Interviews took place in participant's homes, coffee shops, restaurants and community centres. At the beginning of each interview informed consent was obtained from the participant using the Informed Consent Form (Appendix D). Interview length ranged from 30 minutes to an hour and a half, depending on the participant's responses. All interviews were audio-recorded and transcribed verbatim.

Surveys

The survey contained 68 closed questions and was designed for ease of completion for women who were often caring for or holding their babies. The first section of the survey collected basic demographic information, information about the birth experience and prenatal breastfeeding intention. Participants were asked to rate their confidence in their prenatal breastfeeding intention with a three point scale. The second section inquired about their experiences with in-hospital breastfeeding support practices. Participants were asked to assess the effect of a particular hospital practice by responding if the practice had a positive, negative or no effect on their breastfeeding practice. The third section of the survey asked the participants to provide information about their breastfeeding practice again using the three point confidence scales and three point scales to assess the impact of support on their breastfeeding practice. The final section of the survey covered the participant's experience with post-discharge support services and again inquired about the perceived effect of these services on their breastfeeding practice.

Surveys were completed either in-person or over the phone by 41 women between October and November 2015. For in-person surveys, all participants completed the Informed Consent Form (Appendix D) before completing the survey. For surveys completed over the phone, I read the Informed Consent Form and obtained verbal consent before beginning the survey. Survey completion times ranged from 10 to 20 minutes. I clarified questions if participants requested it.

Analysis

Qualitative Data Analysis

Interview transcripts were analyzed using the constant comparative method (Merriam 2009). This method of analysis is effective for identifying concepts and themes important to the experiences which are being studied (Glaser and Strauss 1967). As detailed by Glaser and Strauss (1967), I constantly compared interview transcripts and survey responses to identify patterns and identify code categories. The analysis of interview data process involved identifying narratives which aligned with identified themes as well as identifying emerging themes as they developed. The themes which emerged illuminated the research questions and represented the perspectives and experiences of the participants.

Quantitative Data Analysis

Data analysis was conducted using STATA software. Prior to analysis, the data were transferred from the hardcopy survey forms to an Excel spreadsheet. The data were initially reviewed and cleaned for data entry errors and then imported into STATA. In STATA, the data were again reviewed and screened for errors and improbable values and variables were recoded as necessary. Univariate analyses such as frequency distributions and percentages were used to describe the study sample. Bivariate analyses were also used to examine the relationship between key variables. Histograms and line graphs were used to present the findings from the bivariate analyses.

Mixed Data Analysis

Qualitative and quantitative data analyses were completed concurrently to allow for iterative and mixed data analysis. I triangulated the data sources to check for biases which could

be contributed by each source. Interview data were used to expand results shown in the survey data and survey data were used to reinforce themes identified in the interviews. I used this comparative analysis to highlight and identify gaps, which I would not have been able to do if I had only used a single research method.

Challenges and Limitations of the Recruitment and Data Collection

The small sample size, single location and convenience recruitment technique limit this study. The small sample was also fairly homogeneous which further contributes limitations to the applicability and generalizability of the results of this study. Also, conducting the interviews in English may have excluded certain participants, which is reflected in the fact that English was the first language of all interview participants.

I found it challenging to recruit for interview and survey participants at the same site, as evidenced when I attempted to recruit an interview participant when a group of participants were completing the survey. When the participant, who agreed to be interviewed at a later date, saw the other participants completing the survey she asked to switch to the survey.

As a researcher I tried to be very aware of my position as a mother while conducting the interviews and surveys. I did not experience any major breastfeeding difficulties and very much enjoyed breastfeeding both of my children. As confirmed by my experiences with data collection, breastfeeding is an emotionally charged subject. Participants often discussed feeling of pressure, judgment, guilt, shame, anxiety and depression when reflecting on their breastfeeding experiences. I did not want my positive experiences with breastfeeding to influence the women in any way. Therefore, I did not disclose my breastfeeding experiences or the fact that I was breastfeeding my own child at the time of data collection. I did not disclose

that I am a mother to any participants except to one interview participant who asked if I had children as I was leaving at the end of the interview.

Conclusion

This chapter offers a description of the research design and methods used in my study. The methodology section provides the rationale and goals behind the mixed method design. The recruitment and participant selection sections offer insight into the recruitment and selection process. The section on data analysis outlined the processes and methods used to analyze the interview and survey data. Finally, the challenges and limitations of the methods and process were discussed.

Chapter Five: Analysis

Introduction

Using critiques of medicalization and professionalization, my analysis in this chapter demonstrates how breastfeeding support provided through the health care system offers conflicting discourses, practices and identities that significantly impact women's breastfeeding experiences. Although the majority of my study participants used breastfeeding support in hospital and through the numerous post-discharge programs, many of the women in my study did not meet their breastfeeding ideals. The majority of the women in my study experienced breastfeeding difficulties, which followed highly medicalized births, and were often managed with formula supplementation, medical devices and complex breastfeeding plans. My data suggest that this type of support reshapes breastfeeding into a technically challenging process that requires medical and expert intervention which contrasts with how breastfeeding is portrayed as an easy, natural experience for mother and baby.

This chapter begins with a description of the study participants, including demographic information, childbirth and breastfeeding characteristics and related regional data. The next section explores the women's expectations of breastfeeding versus the reality of their breastfeeding experiences. The subsequent sections utilize critiques of medicalization and professionalization to explore the influence of hospital practices, lactation consultants, pharmaceuticals and formula use on breastfeeding support programs and their impact on breastfeeding women.

Throughout the analysis I use statistics and data on the breastfeeding rates, birth practices and breastfeeding support programs for the region in which the study was conducted. This

regional information provides context to the women's breastfeeding experiences and experiences with breastfeeding support programs. The sections on breastfeeding experiences, breastfeeding support, hospital practices, lactation consultants and pharmaceuticals to support breastfeeding initially provide findings from my study and regional data, followed by my analysis of the findings.

Participant and Regional Characteristics

All of my study participants gave birth to healthy, singleton babies past 37 weeks gestation and neither mother nor baby had any known medical issues which would have prevented them from breastfeeding. All participants initiated breastfeeding.

The majority of my participants were first time mothers (65%), 20% were second time mothers and for 15% it was their third or fourth child. All women, regardless if they are first time mothers, are supposed to receive the same care in hospital and through community supports, and for this reason I decided that it would be advantageous to not limit the study to first time mothers. Study participant's babies were between one and eleven months of age at the time of participation. All participants were able to communicate comfortably in English (study resources did not support translation services).

Certain demographic details, such as education, occupation, income, ethnicity and marital status were not collected for this study. The rationale for this omission was that, as 99.7% of births in the region occur in hospital, the study would explore women's experiences with breastfeeding support, regardless of demographic characteristics. In retrospect, this omission was ill conceived and I acknowledge that the absence of this data limits my study. Without key

demographic data, it is not possible to know the characteristics of my sample to determine if it is skewed or accurately reflects the population.

All participants in my study gave birth in a hospital, which is in line with the regional rate of 99.7% births occurring in hospital. Eighty-six percent of my study participants gave birth with an obstetrician and 14% with a midwife. In this region, in 2010, 90.6% of women gave birth with an obstetrician, but only 2.7% birthed with a midwife (..... 2010b). Rates for vaginal birth (75%) and caesarian birth (25%) in my study were similar to the vaginal and caesarian rates in the region in 2010, although my study's caesarian rate is lower than the regional rate (28%) of six years earlier (..... 2010b).

The majority of my study participants had interventions at birth (80%). This number is low for this region, which might reflect the sample or a poorly worded survey question. It became apparent during interviews that women did not understand the terms used in the question about birth interventions. When asked "Did you experience any birth interventions?" often participants would respond no. When asked specifically if they had had an epidural, medicine to start their labour, medicine to speed up their labour, an episiotomy, vacuum or forceps, they would often answer yes to a number of items.

Prenatally, all participants intended to breastfeed, with 86% intending to exclusively breastfeed and 14% intending to mixed feed. Table 1. below illustrates the breastfeeding practices of my study participants who's babies were over the age of three months at the time of data collection (n=36), for the first twelve weeks. Sixty-five percent of these women reported that they were exclusively breastfeeding at hospital discharge. In 2012/13 the region reported an exclusive breastfeeding rate at hospital discharge of 51% (..... 2014). This sample also had

higher rates of partial and exclusive breastfeeding than the regional rates in each of the time frames. The higher breastfeeding rates for this sample may reflect my study recruitment strategy and/or the characteristics of the women who agreed to participate.

Table 1.

Breastfeeding Duration by Feeding Method				
Feeding Type	Breastfeeding Duration in Weeks			
	Hospital Discharge	2 weeks	6 weeks	12 weeks
Breastfeeding only	65%	65%	61%	58%
Mixed feeding	35%	33%	33%	28%
Formula feeding only	0%	2%	6%	14%
Total	100	100	100	100

Breastfeeding initiation was one of the inclusion criteria for my study, so my participant's initiation rates cannot be compared to regional data. The region's breastfeeding initiation rate reported in 2012/13 was 97.8% (..... 2014). This rate is significantly higher than national and provincial rates. In 2009/10, the most recent reporting period for Canadian and Ontario rates, the region had a 96.7% initiation rate (..... 2010a) while Canada and Ontario had 87.3% and 88.5% respectively (Health Canada 2012). Conversely, the region's exclusive breastfeeding rate at six months, which is the recommended duration of exclusive breastfeeding, appears to be significantly lower than provincial and national rates. In 2012/13 the region reported 10.3% exclusive breastfeeding at six months, compared to the 2009/10 national and Ontario averages which were reported at 25.9% and 26.1%, respectively (Health Canada 2012).

In the region, the rate of partial breastfeeding at six months changed very little in the eight years of reporting. In 2004/05, 58% of mothers reported any breastfeeding at six months,

with the corresponding rates at 57.6% in 2009/10 and 60.1% in 2012/13(..... 2005; 2010a; 2014).

The region in which this study was conducted offers numerous breastfeeding support programs and services in hospital and in the community. At the time of this study, in this region, two of the three hospitals with labour and delivery services had completed approximately 50% of the BFI designation process, with the third hospital planning to start the process in the near future. Eighty-two percent of my study participants gave birth in one of the two hospitals which were engaged in the BFI designation process. All of the hospitals had some breastfeeding support practices that were well established, though they were still working on implementing other practices. The hospitals did not have infant nurseries, only neonatal intensive care units (NICU), so standard practice was for babies to room-in with their mothers 24 hours a day, which is a required BFI practice. All three hospitals also offered out-patient breastfeeding clinic services.

The regional public health department received BFI designation in 2009 and was re-designated in 2014. The regional public health department operates three breastfeeding clinics, a breastfeeding telephone helpline and a peer-to-peer telephone breastfeeding support program. Through various programs, public health nurses also conduct home visits where breastfeeding assistance is provided. All three hospitals employ lactation consultants at least five days a week and lactation consultants are employed in the hospital breastfeeding clinics and regional breastfeeding clinics. In the region, there is also an independent breastfeeding clinic and private, for-fee lactation consultants.

Expectation vs. Reality

The majority of the women in my study reported a disparity between their expectations, primarily based on health promotion discourses and prenatal classes, and their experience of breastfeeding. Eighty-two percent of my study participants reported that they experienced breastfeeding difficulties. One third of my study participants stated their breastfeeding experience did not go as they hoped or planned. These women responded that they did not breastfeed for as long as they hoped or planned, gave formula although they did not want to or did not enjoy breastfeeding. The majority of the participants who responded to this question selected all three factors as contributing to their dissatisfaction with their breastfeeding experience.

Jessica, a first time mother who had a difficult start but was ultimately able to meet her goal of exclusively breastfeeding, commented: “I thought [breastfeeding] was going to be really easy and it wasn’t, but nobody told me.” Tina, a second time mother, echoed this, “I thought [breastfeeding] was going to be easier than it was.” Jasmine, a first time mother who experienced breastfeeding difficulties initially but exclusively breastfed her daughter from one week after birth, expressed the dichotomy between how breastfeeding is portrayed and how she experienced it: “I didn’t really hear any stories about it being hard. Little did I know that it’s very hard...and they always encourage breastfeeding, so of course ... I just didn’t think it was going to be hard. I thought it was going to be natural.” The women often contrasted the ideas that breastfeeding is supposed to be “easy” and “natural” with how difficult it was. Kelly, a first time mother who struggled with breastfeeding, reiterated this theme: “Oh, I think that breastfeeding is portrayed as an extremely, natural, easy thing. And I felt that it was basically anything but that.”

The women quoted above were “successful” in exclusively or nearly exclusively breastfeeding their babies. The participants who had complications with breastfeeding had much

stronger reactions towards their breastfeeding experience. Lucia a first time mother who had a long, difficult experience with breastfeeding commented on how the majority of the time breastfeeding was an unpleasant and painful experience:

I can count on my fingers the moments that it was like, “Okay, I can do this,” and it was wonderful. But 99 percent of the time, it wasn’t...I find that you start with that idea or they make you believe that it’s so easy, that you’re going to take this baby, you’re going to put it on your breast and everything is going to work out and it’s going to be natural. I’m not going to lie - it is the worst experience. Not the worst, the hardest thing.

Lucia discussed when she finally decided to stop breastfeeding:

I was hurting; I was hurting everywhere, like physically, mentally. So, when I started to tell myself, do I continue forcing myself to do something that is not really working and drive myself crazy about it? [Or do I] stop and get mentally healthy [so] I can take care of him?

A common refrain from the participants was that no one talks about breastfeeding difficulties. A number of women in my study noted that when they spoke to friends, they too had had issues, but had not been open about it. Kelly reflected on this: “People don’t really talk about it. I couldn’t even believe when some of my best friends, when I called them and was crying and saying that I was having so much trouble, I couldn’t believe it, they all had trouble too. But just really didn’t talk about it.” Lucia expressed her surprise that many women are formula feeding: “Yes, most of them. I would say 85 percent of them. So I’m like, ‘Wow, I’m not the only one here. And how come we don’t talk about this?’”

Some participants identified the lack of information or education available on the reality of breastfeeding as to why there was such a disparity between their expectations and reality. Clara, a second time mother, reflected on her prenatal education experience: “They talked a lot

about the delivery and the labour, but nothing about nursing or... well, maybe not nothing, but almost nothing.” Lucia was very frustrated by the fact that she felt unprepared for her breastfeeding experience:

They don't talk about what can go wrong. They don't talk about [that] it might not work. They don't explain to you, they don't tell you what you can do. I think that it should have been talked about during prenatal class, you know, about the reality of it. Because I find that it's very much still - it's easy, it's a natural thing, you will, everybody does it, you'll be able to do it too and it's not true. And then, at the hospital, I feel they should talk about it too, they should have explained to me.

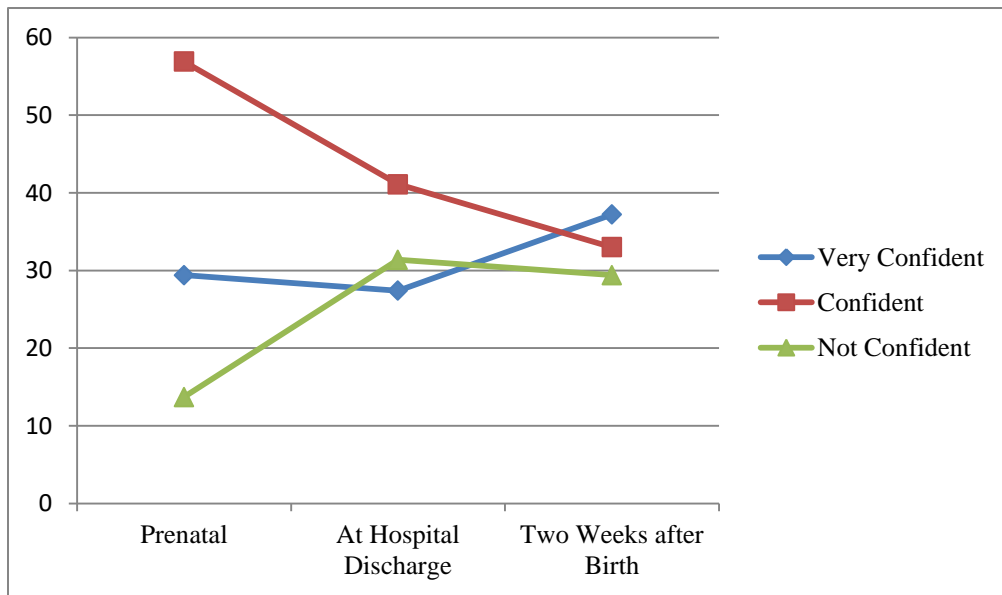
Breastfeeding, particularly exclusive breastfeeding, is heavily promoted as an integral part of being a good mother (Brimoh and Davies 2014). Clara, who did not encounter breastfeeding difficulties, remarked: “I think there's a lot of pressure; from doctors and friends ... It would have made me feel bad if [breastfeeding] wasn't working.” Nicole, a second time mother who had to supplement her daughter with formula, talked about the impact on her identity as a mother: “I just struggled with wanting to be a breastfeeding mother, you know, against her needing to eat, so that was the internal struggle.” Lucia felt the dichotomy between breastfeeding promotion messages and her lack of “success” with breastfeeding very intensely: “It was, again, that message, ‘You have to do it. You can do it. Breast is best.’ So, for me, for my experience, all of that makes me feel - If you don't do it, it's not good enough. And it really made me feel like a failure, like I was failing.”

The disparity between expectations and reality can be seen in the participants' ratings of their confidence in their ability to breastfeed. Prenatally, 29% of my study participants rated their confidence in their ability to meet their breastfeeding intention as “very confident”; 57% felt “confident” and 14% felt “not confident”. Figure 1. shows the change in maternal confidence from prenatal to two weeks postpartum. Participants, who felt very confident prenatally,

remained consistent with a slight increase at two weeks, while the number of participants who felt confident dropped 25% from prenatal to two weeks after birth. The number of study participants who did not feel confident in their ability to breastfeed doubled from prenatal to two weeks after birth.

Figure 1.

Breastfeeding Confidence: Prenatal, at Hospital Discharge and at Two Weeks



The responses and narratives of my study participants illuminate the disparity between their expectations of breastfeeding and the reality of breastfeeding that they experienced. These narratives align with Williamson et al.'s (2012) study of first time mothers' experiences with breastfeeding difficulties which noted that breastfeeding promotion has been effective at promoting 'breast is best', but this messaging does not align with the majority of women's breastfeeding experiences. Interview participants in my study reported that prenatal education and health promotion discourses did not educate them about the potential for breastfeeding difficulties. These narratives align with findings from previous studies which identified that

women did not feel prepared for breastfeeding challenges and felt an information gap existed in prenatal education, health discourses and health care provider interactions (Taveras et al. 2004; Leurer and Misskey 2015).

Lucia's narratives about her difficulties with breastfeeding align with the findings of Larsen and Kronborg's (2013) study of mothers' experiences after giving up breastfeeding. The women in their study also experienced anxiety, and often felt powerless and inadequate when they were not able to breastfeed for as long as they planned (Larsen and Kronborg's 2013). Similar to my study, the authors stated that the women did not feel they chose to stop breastfeeding but were forced to because of the difficulties they experienced. The authors also noted the impact of pro-breastfeeding discourses and how they exacerbated feeling of maternal failure (Larsen and Kronborg 2013).

My interview participants also discussed the pressure they felt to succeed at breastfeeding and how the practice of breastfeeding is closely tied to their identity as a mother. The majority of participants found breastfeeding to be challenging, but did not feel prepared for the challenges that they faced. Lucia's surprise that the majority of women she spoke with were formula feeding reflects the power of breastfeeding promotion discourses which give the impression that all women are breastfeeding. The fact that the majority of women, in this region and in Canada, are using formula is not common knowledge even to a woman like Lucia, who attended prenatal classes and felt she was prepared for birth, breastfeeding and motherhood.

While it is critical to explore the role of prenatal education and health promotion discourses in the disparity that the women in my study experienced, it is equally important to

study other factors that can contribute to breastfeeding difficulties. The impact of medicalized births, infant care protocols and lactation consultant support are analyzed later in this chapter.

Breastfeeding Support

The women in my study relied heavily on breastfeeding support programs. Ninety percent of my study participants reported that they received help with breastfeeding in hospital. Nurses were the primary source of assistance in hospital, but 55% of participants also received help from a lactation consultant. Seventy-one percent of the women in my study who experienced breastfeeding difficulties received professional breastfeeding assistance. Almost 60% of participants were set up with an appointment at the breastfeeding clinic before they were discharged from hospital and almost a third of participants received a home visit from a public health nurse for breastfeeding support. Only 18% of the study participants used the peer-to-peer telephone support program. Lucia, who ultimately stopped breastfeeding and was the only interview participant to use this service, described her experience with the peer support program:

So I signed up for that [the peer support program] before I had him because I was like, “You know, I don’t know how it’s going to go, so it’ll be nice to have somebody there.” And I actually really didn’t think or expect that I would need her so much. I never met her. We would text each other and she was wonderful. She was so helpful and so understanding because she went through something similar so she could relate. She could understand.

My data suggest that the women in my study frequently used the various breastfeeding support programs offered in this region.

The high rates of support program usage without high exclusivity and duration breastfeeding rates calls into question both the impact of these programs and the impact of other

factors on breastfeeding outcomes. In this region, initiation rates are high. The increase in breastfeeding initiation rates have been attributed to pro-breastfeeding health promotion discourses and the increase in hospital breastfeeding support programs such as the Baby-Friendly Initiative. Women have responded to campaigns touting the health benefits, ease and naturalness of breastfeeding and hospitals increasingly promote and facilitate breastfeeding immediately after birth and during the hospital stay. While breastfeeding cannot continue if it is not started, high initiation rates without comparably high exclusivity and duration are problematic. The majority of the support programs these women used were provided through the health care system. The low exclusivity and duration rates could point to, as Sheehan et al. (2009) noted, the fact that this type of support does not meet the needs of breastfeeding women. Critics are concerned that this type of support replaces mother to mother support and maternal wisdom with protocols and institutional practices (Nathoo and Ostry 2009; Barclay et al. 2012). Lucia's comments about the peer support program describe emotional and social support she received from her peer; these types of comments were not common when the women in my study described the support they received through other programs.

Barclay et al.'s (2012) study, which analyzed Australian breastfeeding data for a 10 year period, concluded that the professionalization of breastfeeding support, through structured programs provided through the health care system, had not improved breastfeeding exclusivity and duration rates. This region's breastfeeding rates appear to follow a similar trajectory, suggesting that here too, the professionalization, and I would argue also medicalization of breastfeeding support has done little to improve mid-term and long term breastfeeding rates.

Building on these insights into the women's breastfeeding experiences and experiences with breastfeeding support programs, the next section explores how key forces are shaping breastfeeding support and subsequently impacting women's breastfeeding experience.

In the following sections I aim to contextualize the interactions my study participants had with professional breastfeeding support in the health care system, focusing specifically on three emerging forces which are shaping the nature of support women receive: 1) hospital practices, 2) the lactation consultant profession and 3) pharmaceutical use to support breastfeeding.

Hospital Practices

Medicalized Birth and the Impact on Breastfeeding

Eighty percent of my study's participants experienced medical interventions during labour and delivery; averaging three interventions per birth. For women who had a vaginal birth, 71% reported having an epidural and 34% reported that their labour was induced. Nine of the 10 interview participants had numerous birth interventions: nine had epidurals, four had their labour augmented, three were induced, and three had caesarian sections. Other than the epidural and one planned caesarian, the interview participants did not plan for or anticipate the numerous interventions they experienced.

Induction often creates contractions which are much more intense than normal contractions, and the majority of women whose labour is induced or augmented require an epidural to manage the amplified pain (Labbok 2012). The combination of epidural and oxytocin or Pitocin has been negatively associated with breastfeeding success (French et al. 2016). This cycle of increasing medication and intervention was experienced by four of my 10 interview participants. Amanda, a first time mother who was induced, described her experience with a

series of protocols which increasingly medicalized her birth experience, starting with her induction:

It was, basically from zero to 100 in no time. So, I grabbed the epidural right away. I wanted to try the birth pool, but going from zero to 100, it was like, no. It wasn't going to work out that way at all. Then I guess it was about five o'clock in the morning, they ended up putting me on the oxytocin to try to get the dilating going because there was nothing. Yeah. So it was pretty much all medically induced this labour.

Kelly detailed her experience with labour medications. Once she got to the labour and delivery floor she received an epidural and her labour was progressing, but then she was given Pitocin:

They never actually said "we really want this baby born before the shift change" but it was something that was quite obvious to me just because they were giving me something [Pitocin] that I didn't need. There wasn't really any reason for that, for them to give it to me. And they didn't actually ask me either if I wanted it. They just told me that they were putting it in my I.V. They just said that they gave me the Pitocin and that that should speed along the delivery.

The interventions continued, as Kelly believed she received too much epidural, potentially to counter the effects of the Pitocin:

So, it was a long time of pushing and I found it very difficult to push because of the epidural. So, they were scaling back the epidural, scaling it back because I couldn't feel my - like I couldn't feel the contractions, I couldn't feel my legs. So, my husband had to help me too because I just really had a lot - yeah, I just couldn't feel what was going on. So, I think that that would have - I probably would have gotten him out faster if I didn't have the epidural.

Beth, a first time mother, had a birth experience which involved multiple, different procedures to induce her labour with the induction process stretching over many days. Beth detailed the cascade of interventions: "Three internal, two oral and then finally they had to break

my water and Pitocin. So, one, two, three, four, five, six. Six medications and a stretch and sweep and then I had to do breaking the waters, the seventh and then start the Pitocin, eight.”

Caesarian sections were experienced by 25% of the women in my study. The two interview participants who had unplanned caesarian sections found the situations highly stressful and traumatic. They were told their babies were in distress and that a caesarian was required.

Lucia reflected on the events:

And then [the doctor] said, ‘Or we can have a C-section, get him out, because his heart rate is really slowing down.’ Then I looked at my husband and - I just wanted him out and I wanted him safe and I wanted him okay, so it is what it is, right? You trust the doctors. For the first month I was back and forth in my head, ‘Should I have tried a little bit longer? Would it have made a difference? Would it - maybe, [be better] to have a vaginal birth?’ I don’t know. At that point, you hear his heart rate is slowing down and you don’t want him in distress and you just go for it, right?

Amanda’s comments regarding her induction provide the impression that, regardless of contrary indications, a specific protocol was going to be followed. It is interesting to note that Amanda reported her doctor doesn’t like to go past 10 days, but she was induced at eight days:

Amanda: He was born 41 weeks and one day. I went in and the doctor on-call said, “Has anyone told you your baby’s small?”

Interviewer: What was the reason for inducing, if he was small?

Amanda: He was just late. So, my OB and I, my OB didn’t want to push me past the 10 [days], she was saying she doesn’t like to push the patients past 10 days.

The majority of the women in my study were not informed that birth interventions could impact breastfeeding. One of the BFI required practices is for mother and baby to have skin-to-skin contact immediately after birth and initiate breastfeeding during that time. A number of the

women in my study were incapacitated due to the effects of birth interventions immediately after birth which compromised the intent of this practice.

Lucia, who had an unplanned caesarian section, recalled: “Well, he was born - I was on and off, I was very druggy. So, when I heard him crying, I kind of felt a relief. And then we heard, ‘It’s a boy.’ I saw his face and then I think I fell asleep.” Lucia was able to have skin-to-skin with her son but it was delayed because of the caesarian section and after effects of the medication.

Women are often still under the effects of the epidural when they are encouraged to breastfeed immediately after birth. Lucia recounted the difference between her first and second breastfeeding experience:

[The first breastfeed] felt great and I didn’t feel any pain. It felt really good and I was very excited. But then, when we got to the room, I tried again and it was so painful and I didn’t know what I was doing. When I was talking to the nurse, I was like, “What’s going on? I just did it before and it went so well. I was fine, I didn’t feel any pain.” I was numb, I couldn’t feel anything. She’s like, “Well, it was the effect of the epidural.”

The Systematic Review conducted by French et al. (2016) reported that the medications used in common epidurals readily cross the placenta and blood-brain barrier and may depress infant reflexes and make infants less responsive for rooting, swallowing or sucking. This effect can be problematic as it may prevent good feeding behaviours which may reduce breastfeeding effectiveness and/or influence a woman to quit breastfeeding (French et al. 2016). The authors reported that “Women who perceive breastfeeding as difficult, no matter the reason, are more likely to stop breastfeeding during the first week postpartum than are women who perceive no problems” (Leff et al. 1994 in French et al. 2016:518). Many of my interview participants who

had epidural commented on how their babies were not responsive to feeding while in hospital. At three points during the interview Amanda - who was induced, had epidural and then augmentation - recounted a series of events. Neither Amanda nor the hospital staff discussed the possible connection between the epidural and the baby's lack of response. Amanda discussed how her son was disinterested in feeding, she later recounted how the epidural took almost 24 hours to wear off for her and then how, because he would not feed, her son lost too much weight. At that point Amanda is told they can't be discharged because of her son's weight loss and it is recommended that he be given formula:

Amanda: We did have one nurse who [helped us] because we couldn't wake [the baby] up, he just wouldn't stay awake. I think he wouldn't stay awake long enough to really take [a feed].

...

Amanda: The epidural still didn't wear off. It finally started to wear off where I could walk to the bathroom by myself by about two a.m. I think it wore off officially by 8 a.m. the next day. So it took a whole 24 hours to wear off.

...

Amanda: So it was just a weight concern afterwards and trying to figure out how best do we help [the baby] get the weight back up so that he can be discharged.

While Lucia's nurse acknowledged the impact of the epidural on her breastfeeding, Amanda did not recount discussions with staff about the potential link between epidural and her son's lack of response. Beth, like Lucia, was informed by hospital staff of the potential impact of birth interventions on babies and breastfeeding. With this information Beth did not feel responsible for her daughter's weight loss and the scenario was presented in a measured way:

She was weighed twice in the hospital when she was born and then I think the next morning. And then she was weighed again two days later [at the clinic] They're letting me know about her weight, so they can lose X amount percentage and if it gets down too low they encourage more feeding or when it gets too low

they said they would have a conversation about something else. She was just on the cusp. When she left the hospital she had lost three to five ounces and when they weighed her she had lost two more. They said she's still in that range, because – they were explaining she had so many fluids pumped into her [during labour] that her weight was a little bit skewed when she was born.

The medicalization of childbirth, and the rapidly rising rates of caesarian sections have gained attention in recent years, but the potential impact of birth interventions on breastfeeding has received little attention. Institutional breastfeeding promotion in hospital has improved substantially with the implementation of BFI practices, but the women's narratives suggest that the demedicalizing efforts of BFI often conflicted with the effects of birth interventions and/or infant care protocols.

My participants' experiences align with regional statistics which report that the vast majority of women who give birth in hospital experience multiple birth interventions (..... 2010). These results affirm O'Connell and Downe's (2009) assessment that 'normal births' have become a rare event in a hospital setting. Many of my interview participants described experiences which align with Coxon et al.'s (2014) observations that medical surveillance, technology and protocols can transform birth into a routinized, depersonalized experience.

Social scientists have begun to study the impact of birth interventions on the women who experience them. My study endeavours to extend this analysis and add to the literature on the potential impact of birth interventions on breastfeeding experiences. The women in my study did not feel that they were provided with information about the likelihood of further interventions and very few of them were informed of the potential effects of birth interventions on breastfeeding. These experiences align with the experiences noted in Malacrida and Boulton's (2014) study of Albertan women's birth experiences, where 20 of 22 participants experienced

medical birth interventions. My data suggest that breastfeeding promotion discourses do not provide adequate information about the potential impact of birth interventions, the augmented breastfeeding support which is required after medicalized birth or the potential of medical management of breastfeeding.

The experiences of the women in my study suggest that this lack of discourse on the potential impact of medical practices shifts the responsibility for breastfeeding difficulties away from hospital practices to the mother-baby dyad. The majority of interview participants, who were not informed of the potential effects of birth interventions on breastfeeding, were subjected to a cascade of further interventions to “remedy” breastfeeding challenges. These scenarios align with Larsen and Kronborg’s (2013) observations that all of the participants in their study of women who stopped breastfeeding before they wanted to, experienced complications during birth, but none of the participants in their study connected the complications with their subsequent breastfeeding difficulties.

Immediate skin-to-skin contact is one of the BFI required practices to support breastfeeding. Skin-to-skin contact stabilizes a baby’s temperature, heart rate, breathing and blood sugar, promotes bonding, helps a baby to be calm and cry less, helps the mother to be more confident and relaxed, helps breastmilk flow, may improve breastmilk supply and promotes a good latch (Best Start Resource Centre 2014). The demedicalizing practice of skin-to-skin and this immediate breastfeeding support may be even more important following medicalized birth practices, but can be compromised by events that follow birth interventions.

My participants’ experiences with a less responsive baby after epidural use concur with research findings on the potential relationship between pain medications used during labor and

delivery and suboptimal infant breastfeeding behaviour (Ransjo-Arvidson et al. 2001; Wiklund et al. 2009; Lind et al. 2014; Brimdyr et al. 2015; French et al. 2016). Lucia's experience of trying to breastfeed after her epidural had worn off illustrated one of the ways birth interventions can impact breastfeeding. When this disparity occurs, it's very jarring for the woman who feels she is succeeding at breastfeeding and then abruptly has a negative and painful experience. My data suggest that for these women, the impact of medicalized birth is compounded when information about the effects on mother, baby and breastfeeding are not readily available for women. Lucia's nurse told her, after the fact, that the epidural had impacted breastfeeding, but Lucia's retelling of the story suggests she had no previous expectation of the possibility that this might occur.

Beth's experience of being informed of the impact of birth interventions on her daughter illustrates the positive effects of discourse on the impact of birth interventions. Beth's comments do not suggest that she feels responsible for the situation, which differs from the experiences described by other participants.

Exploring the women in my study's medicalized birth experiences provides context for their subsequent medicalized breastfeeding support experience and provides insight into the potential impact of birth interventions on their breastfeeding experiences.

Contradictions in Baby-Friendly Practices

Baby-Friendly Initiative practices are intended to counter medicalized infant feeding practices, such as unnecessary formula supplementation, feeding schedules and mother/baby separation, which became standard practice in hospitals in the twentieth century (Schmied et al. 2014). The BFI is a global initiative which gained Ontario government support in 2013 and

implements global and governmental breastfeeding promotion discourses at the institutional and interactional levels.

Even though the hospitals where the women in my study gave birth were not BFI designated, the majority of participants experienced numerous BFI breastfeeding support practices (breastfeeding assistance, promotion of breastfeeding on demand, immediate skin-to-skin, no formula, no pacifier and rooming-in) while in hospital. Ninety percent of the women in my study reported that they received assistance with breastfeeding while in hospital and 76% reported that nurses promoted on demand, as opposed to scheduled breastfeeding. Immediate skin-to-skin contact after birth was reported by 88% of participants (of the 12% who did not, 6% were because of medical reasons). Amongst participants whose babies were not in the NICU, 92% reported their babies were not given pacifiers by hospital staff, and all reported that their baby stayed in their room for the duration of their hospital stay. Thirty-seven percent of participants' babies received formula in hospital 63% of this supplementation was reported as given for medical reasons, which will be discussed in a later section.

As discussed earlier, there is evidence that the BFI practice of skin-to-skin immediately after birth is very beneficial for mother and baby (Best Start Resource Centre 2014). Fourteen percent of my study participants believed skin-to-skin contact in hospital had no effect on their breastfeeding experience. A few interview participants referenced messaging about the benefits of skin-to-skin contact. Amy, a first time mother, reiterated the breastfeeding promotion discourse of the nurses about the benefits of skin-to-skin: "The nurses, especially right before you're due to breastfeed they were ensuring that, you know, it was skin-to-skin. They said that'll help your milk come in and [to] feel that connection." Kelly also recounted the benefits of skin-to-skin and referred to public discourses on the practice:

Skin-to-skin is so mainstream now. I remember seeing an ad in the subway for skin-to-skin and the importance that as soon as your baby's born that they need to have skin-to-skin with the mother. And I have girlfriends who have babies and they talked about that too. And so I was sort of aware of the skin-to-skin, the importance of doing it.

While she was aware of the benefits of immediate skin-to-skin, the nurses took Kelly's son away to clean him immediately after he was born. She reflected on this practice: "It was obvious to me that they thought it was better to kind of get him cleaned up, do the weight and everything before giving him to me. And I didn't really want to argue with them at that point either. But I think the next time I have a child I would probably just be like no, no, no I'll just take him first, but I didn't really know."

The BFI practice of rooming-in, where the baby stays with the mother for their entire hospital stay, is designed to prevent the perceived detrimental effects of separation for mother and child (WHO 1998). Eighty-six percent of my study participants felt that rooming-in had a positive effect on their breastfeeding experience. Amy articulated her perspective on rooming-in: "I think [rooming-in] helped to be honest with you because he's right there with you. And when he cried, you know, you just put him on the breast. And then of course his cries would stimulate milk production too. So that helped as well."

The institutional pressure to promote and support breastfeeding can create a situation where nurses are expected to align with BFI, perform required practices and enact a pro-breastfeeding identity, but might be constrained by staffing shortages, time, knowledge and personal beliefs (Nickel et al. 2013). Many participants commented on how nurses actively supported them in their desire to breastfeed. Amy noted that the nurses at the hospital were "very pro-breastfeeding and they weren't giving up". But the participants also noted that often nurses

appeared busy or hurried. Some interview participants reported that often breastfeeding support in hospital manifested with nurses latching and positioning babies rather than facilitating or instructing the women as they begin breastfeeding. Beth, a first time mother, noted that both in the hospital and at the breastfeeding clinic she had to explicitly tell the nurses and lactation consultants to instruct her rather than do the positioning for her. In the hospital, Beth communicated her desires to the nurses: “I wanted to do it myself but [the nurses] sort of guided me along. I’ve heard from a lot of other co-workers and friends and family that a lot of time it’s just the nurses, they grab the baby, they grab you, it’s rough and they latch and I didn’t want that. So I had to be very upfront.” Later Beth recounted a conversation with a lactation consultant: “I told her ‘I really want to get it myself; okay? I’ve been trying for two days; you’re not going to be coming home with me.’” Kelly’s comment is similar; she noted that it was the nurse, not her, who latched the baby: “Well, the nurse came in and basically just grabbed me and his head and just like put him on there. So, it was not me.” Lucia also noted that the nurses seemed to do rather than teach: “I tried. I would do it and then I would show it to her and then she would just fix it, because she was right there. But then I didn’t have her at home to fix it.”

The data from my study suggest that the majority of women experienced BFI breastfeeding support practices while they were in hospital. The women reported that they felt these practices were beneficial to their breastfeeding practice. My participants also noted that nurses and lactation consultants actively promoted and supported breastfeeding. Only 10% of my study participants reported they were not assisted with breastfeeding while in hospital. These pro-breastfeeding practices, which have developed in recent years with increased breastfeeding promotion and the prominence of the BFI, contrast standard infant feeding practices in the

hospital such as mother/baby separation, feeding schedules and formula feeding (Schmied et al. 2014).

It is important to include these demedicalizing discourses, practices and identities when analyzing the medicalization of breastfeeding support. Halfmann's (2011) typology supports a nuanced analysis that ensures inclusion of counter forces that illuminate the extent to which medicalization has occurred. In the hospitals where my participants gave birth, BFI practices were not fully implemented and the hospitals had not achieved designation, but BFI's efforts to reform maternity care practices and demedicalize the hospital experience were evident in the survey responses and narratives.

Amy and Kelly's comments about skin-to-skin and rooming-in illustrate the power of demedicalizing discourses to promote demedicalizing practices. Both women responded to health promotion discourses which promoted these practices. These women's desire to follow recommended practices further illustrates why many women feel a disparity between their breastfeeding experience and their expectations. My data suggest that health promotion information portrays the demedicalized aspects of breastfeeding, but often does not address the impact of medical practices or breastfeeding support delivered through a medical model.

While the majority of my participants felt that the nurses in the hospital supported breastfeeding, they felt the style of support did not educate or empower them as new mothers. These observations align with concerns raised by Sheehan et al. (2009) regarding the impact of these BFI-type policies and practices that are applied rigidly and do not provide allowances for individuals and their specific needs. Sheehan et al. (2009) argued that in the face of time constraints and increased administrative duties standardized care will prevail further discounting

the social and emotional aspects of breastfeeding. In addition to the pressures of health care reforms, numerous studies have found that changing staff attitudes and behaviours is a challenging aspect of implementing BFI (Nickel et al. 2013; Cricco-Lizza 2016). My data suggest that while health care providers can be forces of demedicalization when they support breastfeeding, how the support is executed is critical to empower, rather than disempower these new mothers.

While these breastfeeding support practices appear beneficial, viewing them in context illuminates numerous barriers to their efforts to support breastfeeding and demedicalize infant feeding in hospital. While my data suggest that the women experienced many BFI breastfeeding support practices while in hospital, the majority also experienced medicalized births and infant care protocols which required medical responses. The majority of my study participants experienced breastfeeding difficulties and were dissatisfied with their breastfeeding experience. At 12 weeks, only 58% of my sample were exclusively breastfeeding, where 86% intended to exclusively breastfeed prenatally. These results point to factors working against breastfeeding success and the benefits of BFI practices may be outweighed by other medicalized practices that the women experienced. My data suggest that the contradictory practices of medicalized birth, demedicalized breastfeeding support through BFI practices and risk-adverse infant care protocols make breastfeeding initiation challenging for new mothers. My data also highlight issues with the potential misuse and over-use of the medical provision of BFI Step Six, which is discussed in the next section. Results from my study and other research draws attention to these contradictory forces and highlights that for BFI to have a significant impact on breastfeeding practices, changes must also occur in current birth and infant care practices.

Formula as Medicine

An aspect of BFI which appears to be problematic and undermine breastfeeding success and increase the medicalization of breastfeeding support is Step Six of the *Ten Steps to Successful Breastfeeding* which states: “Give newborns no food or drink other than breastmilk, unless medically indicated”.

All of my interview participants whose babies received formula gave the formula as directed by a health care provider to resolve a medical issue, such as low blood sugar, jaundice or weight loss. In the region, in 2013, 49% of babies received formula in hospital (.....2014). In my study, 37% of babies received formula in hospital. Regional data are not available on the reason for formula supplementation, but for my study, 63% of supplementation in hospital was for medical reasons and 16% was recommended by hospital staff, meaning that 79% of in hospital formula supplementation was initiated by a health care provider.

The distinction between formula supplementation by a health care provider for medical reasons or by recommendation is important. Prior to widespread breastfeeding promotion and the pursuit of BFI designation, formula supplementation for non-medical reasons, which are not physiologically based, such as breastfeeding problems, infant behaviour and maternal fatigue (Breastfeeding Committee for Canada 2011), was the standard practice in hospital (Cricco-Lizza 2009). The BFI designation requires that hospital staff promote and support breastfeeding and no longer recommend formula supplementation for non-medical reasons.

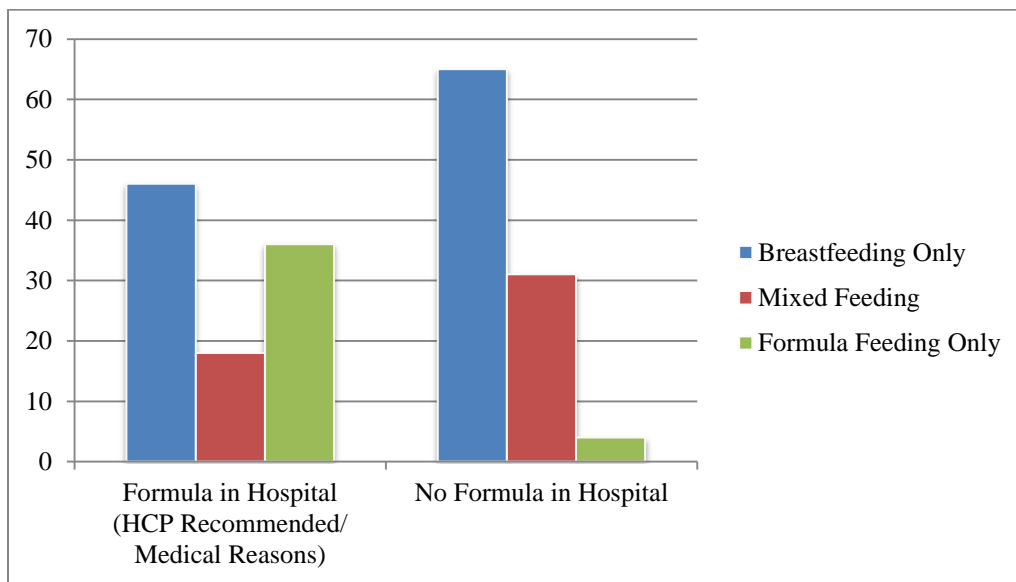
The data from my study suggest that the source of supplementation, mother or health care provider, is a factor in the effect of the supplementation. For the women in my study who requested formula or brought their own, all felt it had a positive effect on their breastfeeding

experience, while 42% of women whose baby received formula for medical reasons felt it had a negative effect on their breastfeeding experience.

The practice of formula supplementation in hospital appears to particularly impact exclusive breastfeeding practices for my participants. Of the 44 mothers in my study who planned to exclusively breastfeed, 15 (34%) of their babies were given formula in hospital. Figure 2. below shows breastfeeding rates at 12 weeks by type of infant feeding. Only 4% of babies in my study who did not receive formula in hospital were formula fed at 12 weeks, compared with 36% of babies who received formula from a health care provider (HCP) in hospital.

Figure 2.

Breastfeeding Rates at 12 Weeks by In Hospital Supplementation



For interview participants, all 10 intended to exclusively breastfeed, although two expressed concerns regarding their ability, as their mothers were not able to breastfeed and one participant was ambivalent about formula. Seven of the 10 babies received medical formula

supplementation in hospital or at a breastfeeding clinic: five for weight loss, one for low blood sugars and one initially for low blood sugars and then later for weight loss. None of the babies who received medical formula supplementation had been diagnosed with a serious medical condition and none of the women reported being diagnosed with a medical or physiological condition that would have caused breastfeeding difficulties. Of the seven babies who received formula supplementation for medical reasons only two returned to exclusive breastfeeding. Of the three babies from my interview sample who did not receive formula in hospital, all remained exclusively breastfed. Two of these three women who exclusively breastfed from birth were second time mothers and, drawing on experience from their first child may have facilitated a better breastfeeding experience.

In my study, infant weight loss was the most commonly reported infant care protocol for which formula supplementation was recommended. Seven of the 10 interview participants responded that their babies had issues with weight loss. Six of these babies received formula to treat the weight loss issue at hospital or at a breastfeeding clinic. All of these participants also indicated they experienced numerous medical interventions at birth, which can potentially inflate baby's birth weight, delay milk production and/or cause mother/baby separation, which can impact a baby's weight (Chalmers et al. 2010; Lind et al. 2014; Brimdyr et al. 2015).

Lucia, who had an unplanned caesarian section, had been discharged from the hospital less than 24 hours before she was instructed by a lactation consultant to give her son formula because of weight loss:

So we take him to the clinic, it was around 9 or 10 o'clock in the morning. The nurse sees him, sees his [dry] lips and she freaks out. Then I freaked out because she freaked out. And I was exhausted. We hadn't slept for like three days - because she's saying that he was dehydrated. So, she weighs him and, at this

point, in the morning, he lost 12 percent of his weight. So when she saw that, right away she opened a bottle of [formula], gave it to my husband to feed him the formula.

Kelly, who experienced numerous birth interventions, reflected on supplementing her son for weight loss. She was told her son had lost too much weight and had jaundice and therefore required formula supplementation. Kelly described her experience:

So we ended up initially having to do a mix because he actually lost 11 percent of his birth weight within the first 48 hours. So to help get him back up, it was lactation consultants at the hospital, especially since he did have jaundice, recommended using the lactation aid. So we supplemented with that, the tube and all that stuff. That was interesting to try to do. So it made it a two-person job at that point.

Amanda was told she could not be discharged because of her son's weight loss. She recounted the events:

[The nurses] actually came up to visit in the room to try to help because at that point, he had lost a little bit of his birth weight. So they came in to try to help. "Okay, let's take a look and figure out okay, we're suggesting maybe to help get his birth weight back maybe doing the lactation aid" Are you comfortable doing that? Do you just want to stick with this? We wanted to be able to go home at some point, little bit sooner rather than later, and I didn't want him to leave losing any more weight. So we opted for [the] lactation aid. So they stayed with us and helped out and everything, and made sure that we were trained on how to do that, and how to clean it up, how to get it started.

Jasmine had a similar experience to Amanda and was told that her daughter had lost too much weight and that they could not be discharged without formula supplementation. Jasmine decided to give her daughter formula so they could be discharged from hospital.

Hypoglycemia, or low blood sugar, is another common issue for which babies are given formula in hospital, despite evidence indicating that breastfeeding is often the ideal route to

resolution (Sundercombe et al. 2014). Nicole was told her daughter required formula to resolve her low blood sugars. Nicole found this experience with in hospital supplementation stressful and felt she did not have a choice in the matter. Nicole's daughter only required one formula feed to resolve her blood sugar issue; Nicole recounted the experience:

When she was born, they did give her to me in the recovery room to breastfeed her, which I did right away, but then they took a blood test and said that it [the baby's blood sugar] was 'deathly low' was kind of how they made it seem. So they forced me to give her formula, which I was actually very upset about. Because there was no conversation really, I felt that it was shoved at me ... That I had to give it. It felt very like its life or death, so it was made that it wasn't really an option.

Nicole attributed the supplementation to a lack of knowledge on the part of the nurses:

I felt that nurses should be more educated on that in the hospital to be able to guide those of us that want to breastfeed, because I was so adamant about [breastfeeding] and I really wanted to do it. So I wish I had known that. Maybe that was on me to educate myself further about that, but beforehand you're not really thinking about it, you kind of trust that a nurse or someone in that position is going to be able to tell you these are your choices, you can try this, if it's not working, then I mean obviously, I'm going to do whatever I have to do make sure my child's okay. But if there was an option, I would have rather tried the colostrum route first and then seen if her blood sugars would have levelled out.

Nicole was later told at an independent breastfeeding clinic that colostrum is the best way to deal with low blood sugars:

To be honest that was one of the things that I was the most upset about ...they [the independent breastfeeding clinic] were the ones that told me that it was ridiculous that I was forced to give her formula in the hospital, that the colostrum should have been enough and that that should have actually levelled out her blood sugars better than the formula.

Jessica complied when she was told to supplement her son with formula because he had low blood sugars. She reported she did not know about the condition and trusted the hospital

staff's instructions: "They were just like, he has low blood sugar and he needs [formula] basically. Are you okay with it? And we didn't know anything. We're like, okay; if he needs it, give it to him."

Interview participants whose babies received formula for medical reasons noted the impact it had on breastfeeding. Kelly commented on how her son reacted to a mixture of breast and formula feeding: "After each feed [we gave him formula] and that helped him gain weight that was for sure. But then I felt he was kind of, not rejecting the breast but that he would be - it was almost like he knew the bottle was coming, so he would then get fussy much quicker on the breast." Jessica had a similar experience: "So I think [giving him formula] didn't help because then he had the little bottles and then it got confusing when you're trying to breastfeed."

A focus of health discourses is on educating women about the risks of formula feeding in an attempt to dissuade them from choosing formula feeding over breastfeeding. Health promotion campaigns which state the virtues of breastfeeding appear to be effective as initiation rates in this region are nearly 100% (..... 2014). These high rates give the impression that women agree with the benefits of breastfeeding and want to breastfeed their babies. The desire to breastfeed was expressed by all of my study participants and overwhelmingly the narratives expressed that the mothers who wanted to exclusively breastfeed did not want their babies supplemented with formula.

The practice of formula supplementation clashed with participants' impressions of successful breastfeeding and the actions of a good mother. Jasmine, who gave her daughter formula in the hospital, reflected on her experience: "I was crying a lot because I didn't want to give her formula, it was a traumatic experience." Nicole also felt very conflicted about giving her

daughter formula: “I struggled, I was in tears, I really didn’t want to formula feed, I was so against it and I really, really struggled, it was really hard. I remember sitting here balling my eyes out, I’m like, I don’t want to give it to her.”

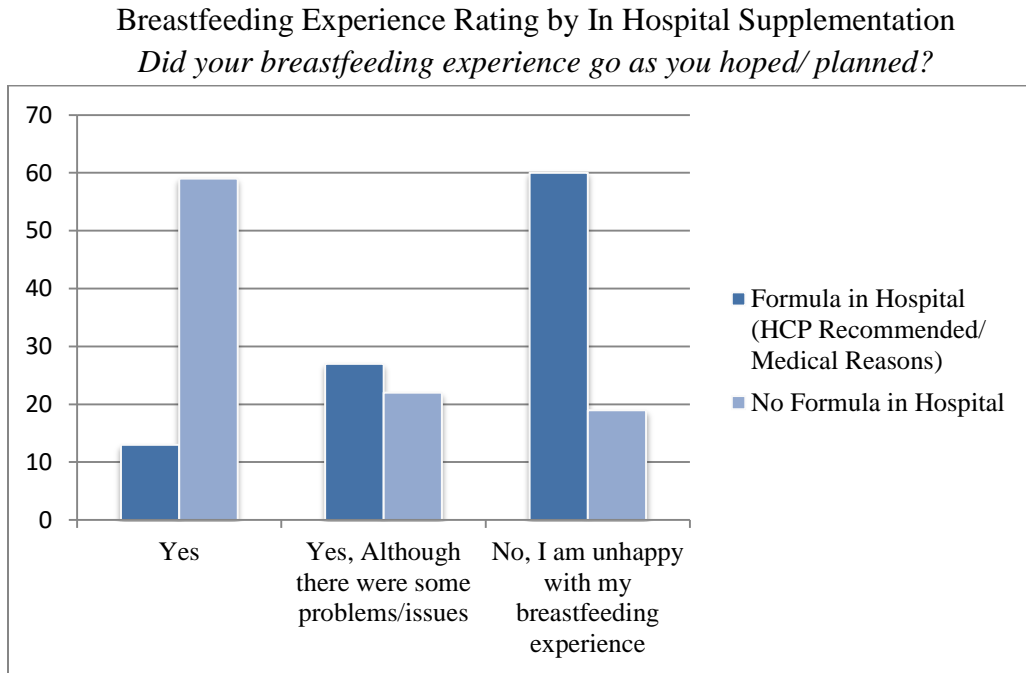
Amy, who ultimately stopped breastfeeding, reflected on the impact of being told she needed to use formula because her body was not producing enough breastmilk:

And I have to say unfortunately [at] the [hospital breastfeeding clinic] I found them a little bit abrasive. You walk in there “Oh, well he lost this amount of weight and you need to do formula because your breasts aren’t handling it.” You know, it’s just the way – and it may have just been a specific lactation nurse, I don’t know. But you feel attacked and you’re like okay I already feel like crap because I can’t breastfeed my kid very well, I don’t need to be told that my kid is starving to death.

The results presented in Figure 3. below provide some insight into the impact of formula supplementation by health care providers for the participants of my study. The majority of women (60%), whose babies received formula from a health care provider in hospital, either for medical reasons or because the health care provider recommended it, felt their breastfeeding experience did not go as they hoped/planned. The majority- approximately 60% of participants-, whose babies did not receive formula from a health care provider, stated that their breastfeeding experience went as they hoped/planned. These numbers do not seem to be contingent on breastfeeding intention – more participants who planned to mixed feed were unhappy with their breastfeeding experience. This again potentially points to the source (health care provider) or context (for medical reasons) of formula supplementation as the cause of dissatisfaction. The dissatisfaction rates could reflect a myriad of factors: the stress of being told your baby has a medical issue, the impact of formula use on continued breastfeeding or breastfeeding

difficulties, but my data provide insight into medical formula supplementation that suggests directions for future research.

Figure 3.



Exploring the implications of medical formula supplementation and the requirements of BFI Step Six are critical to an analysis of the medicalization of breastfeeding support. The data from my study suggest that formula supplementation in hospital, by health care providers and the formula restrictions of BFI Step Six, while potentially well intentioned, are problematic for breastfeeding women, particularly for the growing number of women who are committed to exclusive breastfeeding. As discussed previously, medical formula supplementation is necessary in numerous situations, particularly for premature or ill babies. My data suggest that formula supplementation was frequently used as an efficient remedy for issues following birth interventions, hospital practices and risk-adverse infant care protocols. The focus of my study is to provide insight into the impact of medical formula supplementation on a woman's

breastfeeding experience and aligning with recent research, shed light on the potential of over-use and misuse of medical formula supplementation. Research suggests that while breastfeeding is not a panacea in all cases, medical formula supplementation – whether for a valid medical condition, a medical condition created through hospital practices or a misuse of the protocol – has an impact on a woman who intends to breastfeed. This type of supplementation can portray her body and her ability to breastfeed as inadequate, which can undermine her confidence and impact her breastfeeding practice.

Three regional health reports produced in the last 10 years discussed how formula supplementation interferes with successful breastfeeding. In 2009, the regional health department conducted a study to review formula supplementation for newborns in regional hospitals (..... 2010c). The study noted that unnecessary formula supplementation in the first few days after birth greatly reduces the probability of successful breastfeeding over the longer term (..... 2010c). The report also recommended that protocols for infants with hyperbilirubinemia (jaundice), and hypoglycemia (low blood sugar) be reviewed to minimize unnecessary formula supplementation (..... 2010c).

As my results show, the majority of in hospital formula supplementation in my study was initiated by health care providers, most frequently to resolve medical issues. Health care provider formula supplementation strongly contradicts discourses about the risks of formula. The data from my study suggest that this conflict between discourse and practice may not only affect infant health but also the success of the mother's breastfeeding practice. Braimoh and Davies (2014) also observed in their study that formula supplementation was frequently given as recommended by health care providers. The women in their study experienced this type of

supplementation as abrupt and dismissive of their desire to breastfeed (Brimoh and Davies 2014).

Health promotion discourses are aimed at educating women so they do not “choose” to feed their babies’ formula, but the results from my study show that health care providers, not mothers, are often the ones who initiate formula supplementation. Hospital formula supplementation is presented as a “choice” made by parents, but in that environment, advised by a health care provider, it is not surprising that the parents choose to supplement. In addition, the narratives from my study suggest that this use of formula contradicts the “pro-breastfeeding” experience that the mother had during her stay in the hospital. Brimoh and Davies (2014) observed that when health care providers say formula is needed to achieve optimal infant health but simultaneously present breastfeeding as a natural act women experience this scenario as incompatible and distressing. The women’s experiences in my study are similar to participants in Brimoh and Davies’ study of postpartum constructions of infant feeding in hospital. The authors noted that after giving their baby formula in hospital, the mother’s “previous understanding of ‘breast is best’ shifted to include the use of supplementation to achieve optimal infant health” (2014:87).

In my study, a significant number of babies whose mothers intended to exclusively breastfeed were supplemented with formula. As more women intend to exclusively breastfeed and hospitals and public health departments pursue BFI designation, understanding the impact of medically indicated formula supplementation will become increasingly important. The results in Figure 2. suggest a potential relationship between formula supplementation by a health care provider in hospital and subsequent formula use. These data align with Chantry et al.’s (2014) findings that for women who intended to exclusively breastfeed, in-hospital formula

supplementation was associated with nearly double the risk of not exclusively breastfeeding by 60 days and triple the risk of stopping breastfeeding by day 60. Chantry et al. (2014) highlighted the importance of studying the impact of in hospital formula supplementation for mothers who intend to breastfeed exclusively, as these women are strongly motivated to breastfeed and do not want their babies to have formula.

My data also suggest that a review of infant care protocols, such as those for jaundice, low blood sugar and infant weight loss could be beneficial to ensure the purpose of the protocol aligns with the conditions within which it is enacted. While these protocols and medical formula supplementation are necessary, the misuse and over-use of these protocols is problematic. Not only is the practice of formula supplementation advertised as detrimental to the baby's health and disruptive to breastfeeding practice, but this type of supplementation conveys a message to the mother that she is failing at breastfeeding and putting her baby's health at risk. My data aligns with Braimoh and Davies' (2014) findings that in these scenarios, health care provider's discourses often present formula as a remedy that would restore health for a baby whose mother's body was inadequate.

My data suggest that hospital practices often medicalize breastfeeding, but discourses do not provide adequate information for women about the potential impact of birth interventions on breastfeeding or infant care protocols which utilize formula supplementation. My data also suggest that this disconnect results in the women feeling responsible for breastfeeding difficulties without the acknowledgement that these and other external factors contribute to the difficulties they experienced.

The very high number of women in my study who reported their babies had unacceptable weight loss provides insight into a number of hospital practices. If the weight loss is attributed to inadequate breastmilk being transferred from mother to child, in a hospital that heavily promotes and supports breastfeeding, then the hospital should examine the support it provides. If the weight loss is because of inflated birth weight resulting from infant fluid retention, then birth weight protocols should be reviewed. The women's narratives rarely discuss these potential causes, but frequently convey feelings of maternal responsibility, guilt and failure.

As discussed in the literature review in chapter three, BFI requirements restrict “unnecessary” formula use in hospital. Women who request formula must be informed of the risks and sign a consent form and hospital staff must restrict non-medical use of formula. Babies supplemented with formula for non-medical reasons must not be higher than 25%. With in-hospital formula supplementation in the region at 60% only six years earlier (..... 2009), these requirements necessitate a significant shift in hospital practices. The remaining 75% of babies are required to be exclusively breastfeed at hospital discharge, with the caveat that medically indicated formula supplementation can be deducted from this number. The results from my study would meet this BFI requirement; although 37% of babies in my sample received formula in hospital, 23% of those were reported for medical reasons. While BFI appears to acknowledge the fact that some women will want to use formula, as they allow up to 25% supplementation rate, hospitals may find it difficult to achieve these statistics. Faced with the effects of medicalized birth, risk-averse infant care protocols and nursing staff and time constraints, as Reddin et al. (2007) noted, the medically indicated provision is vulnerable to misuse. The implications of the misuse of this type of provision are not benign, and I suggest these implications have not been fully considered. The narratives from my study that describe medical formula use predominately

report situations where formula was given as required by a protocol rather than to treat a serious, imminent medical condition. The women experience a scenario where they are told they are not successfully breastfeeding and not providing adequate nutrition to their baby. They are told their baby's health is at risk from a medical condition and that formula is the ideal way to remedy this medical condition. My data show that these scenarios were very stressful for the women. These experiences can significantly impact a woman and her future breastfeeding practice, but these potential consequences are not being considered when formula is given under the medical provision.

While there are situations where formula supplementation in hospital is necessary, my data shed light on the impact on mother and baby when formula supplementation is given under the medically indicated provision. Data suggest that this type of supplementation may be deemed necessary to deal with the effects of medicalized birth, inadequate initial breastfeeding support, health care provider time constraints, or risk adverse protocols rather than a baby's medical condition or a mother's failure at breastfeeding.

The women's narratives express strong feelings about formula. While the women followed health care provider's recommendations to give formula, two themes emerged from the women's comments about the use of formula: they internalized messages about the health risks of formula and were concerned about the implications of continued formula use on their status as a good mother. The narratives reflect health discourses on the harms of formula and reflect their personal concerns about their identity as a mother. These comments do not give the impression that the women ever intended to use formula or expected that medical formula supplementation would be used to support their breastfeeding practice. My data suggest that the women

experienced the practice of medical formula supplementation as contradictory to health promotion discourses and their mothering ideals.

The data from my study on medical formula supplementation provides insight into institutional practices and their impact on the breastfeeding women. Hospital protocols which use formula supplementation to resolve issues do not appear to take into consideration the long term impact of this medicalized approach on mother, baby and continued breastfeeding.

Clinical Breastfeeding Management

The majority of the women in my study sought out, deferred to and relied on lactation consultants. My participants reported a high use of lactation consultant support, particularly the women in the sample who did not report serious breastfeeding issues. Lactation consultants were seen as experts and the narratives describe interactions with lactation consultants where lactation consultants checked, confirmed and validated aspects of breastfeeding. Amanda described her experience with a lactation consultant in hospital: “So [the lactation consultant] double-checked everything. She didn’t see any mistakes.”

Fifty-five percent of my study participants were assisted with breastfeeding in hospital by a lactation consultant. After hospital discharge, 59% of my study participants used breastfeeding support programs, frequently supported by lactation consultants. This level of lactation consultant support demonstrates that lactation consultants have become an integrated component of maternity care. Jasmine illustrates how ubiquitous lactation consultants have become. She gave birth on a weekend and the hospital did not employ a lactation consultant on weekends. Jasmine was very surprised and reflected on this:

Jasmine: [The] Lactation consultant [was not there] for the weekend, the two days that I was there and they weren't there.

Interviewer: They don't have a lactation consultant on the weekend?

Jasmine: Yeah apparently not, which is a little strange. I'm like, how do you not have a lactation consultant?

Participants in my study regarded lactation consultants as health professionals and both the women and nurses appeared to defer breastfeeding support to lactation consultants. Beth, who didn't experience any serious breastfeeding challenges, commented on how breastfeeding support was the domain of the lactation consultant: "Actually seeing how I actually latched while I was holding her was more left to the lactation consultants." Beth continued: "before I had gone to the class, the lactation consultant popped in to see me. She readjusted the baby to get a deeper latch, which we found was better, so not having her come sooner, I would consider detrimental."

Kelly reflected on how beneficial she thinks a lactation consultant is:

I think for me it would have been nice to have the lactation consultant to come into my room earlier I think. I think that that would have been really nice. I know that it's obviously they probably don't have enough staff to have somebody's who's just kind of going around and talking to everybody as they come out of the delivery room. So, I completely understand that that wouldn't be necessarily possible, but I certainly would have liked that.

A number of interview participants were instructed by lactation consultants to follow complex, time consuming plans to support breastfeeding. Often the women in my study would be instructed to breastfeed, formula feed and pump every time their baby needed to eat, which for a newborn is up to 10 times a day or more. In addition to this demanding schedule, a number of interview participants were instructed to use a lactation aid for every feed. While they followed the plans, many of the women resented needing interventions and wanted a simple,

uncomplicated breastfeeding experience. Jessica detailed the plan she was told to follow by a lactation consultant: "... every single time I was feeding him it was an hour and a half process. I'd feed, pump, formula – it was awful. I was like - I don't know how I'm going to go on like this." The next time Jessica went to the breastfeeding clinic the lactation consultant working that day told her she could discontinue the plan. Jessica described how she felt: "Relieved. And she also told me I could stop pumping. It was like she was my hero. I don't have to give him formula and I don't have to pump, and that was wonderful."

Jasmine detailed her experience with a breastfeeding support plan: "when you're trying to feed her twenty minutes on a tube and a pump, twenty minutes on each boob and then go back to the maternity ward and then come back. It was very exhausting." Lucia expressed a similar sentiment about the plan she was advised to follow: "...it was a lot because it was feeding him and pumping and then, next thing you know I'm feeding him again and I'm pumping again, so it was a constant."

Jessica was instructed by a lactation consultant in the hospital to use a nipple shield when feeding her son. She stated that the lactation consultant did not explain what was involved in using the nipple shield: "I wish that I had not used [the nipple shield] right away. If I could have avoided it [I would have] because he was on it for four months. And I didn't know that it would take a while or it could be a permanent thing. No one really explained that to us. So that was kind of a nightmare." Jessica returned to the clinic three times in an effort to wean her son off the nipple shield:

She [the lactation consultant] told me to come back because she wanted to help me get off the shield. And then the lady that I saw [said] it's not bad to use it...he'll get off it eventually. The third time I think I went back for more help

getting him off of it and the lady she's like the same thing, he'll get it off it eventually, but that was when he was a bit older.

As advised by a lactation consultant, half of the interview participants used a lactation aid at some point in their breastfeeding experience. As described earlier, these devices are used to deliver formula to the baby through a thin tube which is taped to the mother's breast during feeding.

Kelly detailed the contradictions she experienced with the lactation aid. While she felt it improved her son's latch, she discontinued using it because she felt it was too difficult:

...they [clinic staff] showed me how to do it and I actually feel like the tube feeding did improve his latch because it was after the tube feeding that it didn't seem like he needed the formula [by bottle] anymore. But the tube feeding was disastrous. It would just get all over my pillow and I could never tell when it was in properly. It was just not for us.

Some of the women used lactation aids for extended periods of time. Both Nicole and Amy used lactation aids for months. Amy reflected on the sequence of events which led her to stop breastfeeding and move to formula feeding:

So [at] three months he'd grab the tube [of the lactation aid] and pull it out of his mouth, because I had it taped to my breast. He didn't want anything to do with it. So then I thought well this is ridiculous, why don't I try to do the bottle formula? So I'll feed him on the breast 15 minutes on each side and then I'll fill the bottle and give him the bottle afterwards. Which is way less stressful than taping things and especially in the middle of the night. And he took to that. So he was doing really well there and then at four months he went and he wanted nothing to do with the breast. He was just pushing it away and slapping it. And, you know, he was really fighting and just didn't want it and he'd freak out and I'd just give him a bottle because it was too tiring.

Nicole recounted her experience at an independent breastfeeding clinic; she felt they did not portray the lactation aid realistically:

...they [the clinic staff] were hilarious, they're so pro-breastfeeding. I'm like how do I [use the lactation aid] in public? I can't even imagine, [the] little cup, I'm going to knock it over ... I'm like forget it. And then they said it's easy, you need to wear a shirt and shove it in there and I'm like I love how easy you make it seem. [I]t's not that way with a baby, they don't stay still, right? They're all over the place. And it was hard to get the tube in I found with her, she was a little bit difficult to get the tube in her mouth, she would move around a lot.

Amanda was instructed by a lactation consultant that because she was supplementing her son with formula through a lactation aid she should also pump so she would not lose her breastmilk supply. Amanda then had to purchase a breast pump and add another time-consuming and unpleasant step to her breastfeeding experience.

The narratives from my study revealed that participants viewed lactation consultants as an essential source of breastfeeding support. While the majority of my participants received breastfeeding support from a lactation consultant, the narratives suggest that this support did not typically involve encouragement and education, but rather involved medical practices, such as breastfeeding plans, medical devices and medical formula use. The narratives also revealed that the women found these interventions alienating, difficult and unrealistic. The women's narratives suggest that while lactation consultants support breastfeeding, which counters historical practices of medicalized infant feeding, they often use a medicalized approach to deliver this support. My data portrays this simultaneity as conflicting and challenging for breastfeeding women to navigate.

Halfmann noted that medicalization proliferates when new practices are created to treat newly created problems (2011). Checking a baby's latch is not traditionally within the domain of

clinical breastfeeding management (Torres 2014), but increasingly, my data suggest that lactation consultants are assisting women with all aspects of breastfeeding. In addition to checking latch and positioning babies at the breast, the women's narratives report that lactation consultants frequently used a complex plans and devices to manage breastfeeding difficulties.

The majority of my participants interacted with lactation consultants in hospital or in a breastfeeding clinic shortly after discharge from the hospital. These women were put on these plans or told to use these devices shortly after giving birth; therefore, they did not have the opportunity to experience "normal", demedicalized breastfeeding. While these plans are well intentioned and put in place with the express purpose to support the mother in her desire to breastfeed, they completely transform the breastfeeding experience into one which is exhausting, unpleasant and far from its idealized version. Subsequently, the women's narratives depict breastfeeding as too difficult to do without professional help. While breastfeeding plans may be necessary to support breastfeeding that has been impacted by medicalized birth, infant care protocols or hospital practices, they sharply contrast with health promotion discourses which portray breastfeeding as easy and natural.

Freidson's conceptualization of a profession includes the profession's power to define the problem and to then perform specialized tasks which deal with the problem (1970). By treating breastfeeding as a specialty, lactation consultants recreate breastfeeding as technically challenging and in need of expert intervention (Torres 2014). Lactation consultants, as clinical managers of breastfeeding, are the health care providers who devise breastfeeding plans, recommend and distribute lactation aids and nipple shields. The professional lactation consultant emerged to address the gap in care which exists in part because nurses, doctors and midwives often have minimal training and knowledge to adequately support breastfeeding (Eden 2012).

The narratives from my study align with Waggoner's (2011) observations that lactation consultants have added a layer of expert knowledge to the health care process. Jasmine's surprise and dismay that a lactation consultant was not available on the weekend, suggests that lactation consultants are now viewed as a key component of maternity care. In Halfmann's extension of medicalization analysis he argued that medicalization does not only exist in a hospital or doctor's office or through the doctor- patient interaction, but can occur through the actions of other health professionals (2011) such as lactation consultants.

One of the ways lactation consultants enacted the gatekeeper role was by devising complex breastfeeding plans for the women in my study to follow. Here lactation consultants can exercise interpretation and judgement to ensure their position between the client and the benefit the client seeks (Freidson 1986). Jessica's comments regarding her relief and appreciate for the lactation consultant who "freed her" from a feeding, supplementing and pumping routine demonstrate the power of lactation consultants in their medical authority role. Often the reason behind, or purpose for, various interventions was not explained to the women in my study. Freidson used the example of the librarian's knowledge over the library to illustrate a way that professionals maintain their power and control over clients (1986).

Similar to breastfeeding plans, participants reported that lactation consultants consistently employed medical devices in their breastfeeding support work. Halfmann noted that, at the interaction level, providers such as lactation consultants use medical technologies to gain the legitimacy and status that such practice conveys (2011). Lactation aids, nipple shields and breast pumps were frequently used by interview participants as advised by lactation consultants. Typically, my participants did not have prior knowledge of the devices so they relied completely on the lactation consultant's knowledge and expertise. Freidson stated clients are typically not

sophisticated or powerful and that the professional's position as gatekeeper of desired resources combined with a monopoly of knowledge creates a position of interpersonal power that few are in a position to challenge (1986).

The recommendation of a lactation aid is seen as an improvement over feeding through a bottle, but introducing a lactation aid adds a barrier to the breastfeeding experience. The women in my study who used these devices found them alienating, messy and complicated. Lactation aids contribute to the breastfeeding paradox these women must navigate; they are designed to support breastfeeding (demedicalizing infant feeding) but are a medical device (medicalizing breastfeeding).

The high rate of lactation aid use in my study calls into question the necessity of these devices to support breastfeeding for healthy, full term babies. This high level of use may point to a medical approach to support breastfeeding which has been impacted by medicalized hospital practices. Regardless of the utility of the devices, all of the interview participants who used lactation aids commented on how difficult the device was to use and how it complicated their breastfeeding experience. The women in my study's experiences align with Torres' (2014) observations that women who used medical devices to support breastfeeding view them as a barrier between themselves and their expected breastfeeding experience.

The term "management" of breastfeeding is problematic in that it locates control with the lactation consultant rather than with the mother (Grenier in Eden 2012). With this new definition, lactation consultants become necessary to manage the new reality of breastfeeding. Lactation consultants would start the women in my study on devices but the women were unable to stop using the devices without further support. The narratives suggest that the lactation consultants

monopolized both the knowledge and provision of these devices. Many of the interview participants visited breastfeeding clinics numerous times because of their reliance on lactation consultant's expertise. Jessica's multiple trips to the breastfeeding clinic so the lactation consultant could help her wean her son off the nipple shield aligns with Freidson's (1986) observation that professions exercise power and control by maintain a "knowledge gap" between their role and their client.

While my data suggest that breastfeeding support provided by lactation consultants is highly medicalized and professionalized, the context within which they work must be considered. Freidson (1986) noted that countervailing forces served to moderate a profession. The increase in breastfeeding rates has contributed to the demedicalization of infant feeding practices in the last century and the primary goal of lactation consultants is to support and promote breastfeeding, but the narratives from my study illustrate medicalized breastfeeding support from lactation consultants. This would point to the power of the countervailing forces of medicalized births and hospital practices, and their influence on how, lactation consultants in health care settings, provide breastfeeding support.

Carroll and Reiger (2005) studied lactation consultants in Australia and found that they enacted a distinct identity which straddled seemingly contradictory maternalistic and medicalized discourses. My findings differ: some participants recounted how lactation consultants were "very helpful" or "did not judge them" or recognized they were trying very hard to breastfeed, but no participants recounted exchanges about maternal wisdom or the social and emotional aspects of breastfeeding. Halfmann points to the power of medicalizing practices which substitute scientific/medical accounts for ones based on the individual's own experiences (2011).

My findings also differ from those of Torres (2013; 2014; 2015), who has studied the professionalization of lactation support. She frequently observed lactation consultants enacting both medicalizing and demedicalizing practices. The narratives from my study reflect primarily medicalized discourses and practices when the women interacted with lactation consultants. Enacting a medical expert identity, using breastfeeding plans, medical devices and formula to support breastfeeding dominated these women's descriptions of their experiences with lactation consultants. The disparity between Carroll and Reiger's and Torres' findings and mine point to a situation which was also observed by Taveras et al. (2004) in their study of clinician and mothers perceptions of breastfeeding support. Taveras et al. (2004) observed significant disparities between the clinician's and mother's perceptions of the nature of breastfeeding support they received. Clinicians reported providing breastfeeding support and making recommendations which support, as oppose to contradict, breastfeeding much more frequently than the mothers reported receiving support of this nature. Carroll and Reiger and Torres interviewed lactation consultants, where I interviewed breastfeeding women. In Carroll and Reiger's and Torres' studies the lactation consultants may have presented an idealized version of themselves and their role, which reflects the common research issue of social desirability bias (Babbie and Benaquisto 2010). In my study the participants may have focused on negative or complicated events because of how they impacted their breastfeeding experience or also presented idealized versions of themselves. Regardless of the caveats, the narratives from my study still provide insight into the impact of medicalized breastfeeding support.

Lactation consultants have worked hard to establish their profession and place in the health care system and women now see them as an essential support service. While medicalized practices might have been countervailing forces to early lactation consultants, the narratives from

my study suggest that lactation consultants embrace medicalized breastfeeding support, particularly in a the hospital setting.

When she was asked how lactation consultant support could be improved, Jessica responded:

Maybe trying more to help to get him to latch naturally and maybe no formula and as I said, explaining everything that they were doing, how it was going to affect, how it was going to be, that would have been very helpful.

Jessica's comments point to a desire for support which facilitates breastfeeding without interventions and educates and empowers the mother, which is contrary to the type of support many of my study participants described. In the following section I explore the impact of pharmaceutical use to support breastfeeding on the women in my study's breastfeeding experiences.

Pharmaceuticals over Formula

As discussed previously, Domperidone is a gastrointestinal motility drug which is currently prescribed off-label in Canada to increase breastmilk production (Mannion and Mansell 2012). Both of the interview participants who used Domperidone noticed a significant increase in breastmilk production when they started taking the medication. Survey participants were not asked about the use of medications to increase breastmilk production.

Amy, who struggled with breastfeeding difficulties, and at four months stopped completely, expressed the power of "breast is best" discourses. She stated that she would have much preferred to use medication, over formula, if it would have helped her to succeed at breastfeeding:

I think I would have been a little bit more open to the medication than the formula in that first week. I would obviously do a lot of research - How long has it been around? Have they done a full cycle to see if any development's affected by this medication? Does it get absorbed into the babies? But I would have maybe preferred it because, I mean, breast is best, right? So, it's kind of like with that motto and wanting the best for your kid for immune abilities and stuff, I much would have preferred being on medication and breastfeeding successfully than giving him formula.

Nicole, who expressed a strong desire to be a “breastfeeding mother”, started Domperidone when her daughter was six weeks old and was still taking the medication at the time of the interview 10 months later. She commented on how she received little guidance on using the drug:

Next week I'm going to start weaning down. They didn't really say [how long I should take it] now that I think about it, I just decided to stay on it, because I wanted to make sure I was producing enough breastmilk to be able to feed her. So I just stayed on it and went back to my family doctor and just kept getting prescriptions for it. But now I'm at the point where it's like I don't know if I should be on the medication for this length of time, I should probably get rid of it.

Kelly, a first time mother who struggled to keep her son's weight up, even with formula supplementation, started Domperidone when her son was eight weeks old. At the breastfeeding clinic she was given both Domperidone and Fenugreek and was told by taking these she would be able to stop formula supplementation. Despite noticing an increase in breastmilk supply, Kelly continued to struggle to maintain her son's weight and had to reintroduce formula. She planned to continue taking Domperidone until she stopped breastfeeding when her son turned a year old.

All three of these women wanted to avoid feeding their babies formula and viewed Domperidone use as a way to continue breastfeeding. These participants also experienced

medicalized births, Nicole had a planned caesarian, Kelly and Amy both experienced numerous birth interventions, which may have contributed to their breastmilk supply issues.

These narratives suggest that the use of Domperidone is seen as preferred over formula, as it allows women to continue to breastfeed and enact a breastfeeding mother identity. Amy's comments illustrated how women have internalized the "breast is best" discourses and want to meet this ideal of infant feeding. Breastfeeding is not portrayed as an experience between mother and child but rather a desirable identity and breastmilk as a medical product with superior immune properties. Amy recounted public health discourses about the benefits of breastfeeding and she regretted not being able to breastfeed. In hindsight, Amy saw appeal in using a pharmaceutical to assist her to meet this ideal.

These narratives align with the shift in prescription trends, initially Domperidone was prescribed for mothers of pre-term babies or re-lactation (Mannion and Mansell 2012), but similar to the 28% of participants who used Domperidone in Mannion and Mansell's (2012) study, my study only included healthy, full-term babies. Both studies were very small, therefore conclusions cannot be drawn, but these findings provide insight and direction for future research.

In their retrospective audit of Domperidone dispensing at an Australian tertiary hospital Grzeskowiak et al. (2013) found that the average duration of Domperidone use was 12 days, while Paul et al. (2015) stated that because of its off-label use, to date there are no study which have investigated the impact of prolonged Domperidone use on mothers or babies. Nicole used Domperidone for 10 months. By staying on Domperidone Nicole maintained a medical practice which enabled her to maintain the demedicalized practice of breastfeeding. In this way, Domperidone use illustrates Halfmann's conceptualization of how medicalization and

demedicalization can occur simultaneously. Similar to other demedicalized and medicalized practices which have been explored in this study, Domperidone use complicates the breastfeeding experience and conflicts with women's expectations of breastfeeding.

Galactagogue use is an increasingly common way to treat low breastmilk supply. Conrad (1992) argued that medicalization increases when medical models and definitions become more prevalent in everyday life. Historically, if women had breastmilk supply issues doctors would have recommended they switch to formula (Wolf 2012). Now with the strong promotion of 'breast is best' the pursuit of the breastfeeding ideal is going to greater and greater lengths. Decreasing formula use is seen as demedicalizing infant feeding, but this type of breastfeeding support medicalizes breastfeeding. Rather than addressing the potential issues behind low breastmilk supply, such as birth interventions, hospital practices or inadequate support at breastfeeding initiation, increasingly breastmilk supply issues are being pathologized and treated through a medical model.

Conclusion

My data provide insight into the influence of hospital practices, lactation consultant support and pharmaceuticals used to support breastfeeding on the breastfeeding experiences of the women in my study. The support these women received, through the health care system, was predominately medicalized and professionalized. My data suggest that through these interactions breastfeeding is reshaped and can become a difficult, technically challenging endeavour; not easy and natural as the women had expected. These results highlight a need for further attention to the effects of this support on a woman's satisfaction with breastfeeding, her confidence in her ability to breastfeed and on breastfeeding outcomes.

Chapter Six: Conclusion

Introduction

My study has focused on understanding the impact of medicalized and professionalized breastfeeding support on women's breastfeeding experiences. Utilizing critiques of medicalization and professionalization, the goal of this thesis was to analyze, through the women's interactions with breastfeeding support programs, the impact of hospital practices, the lactation consultant profession, and pharmaceuticals used to support breastfeeding.

Overview

Overall the women in my study experienced medicalized and professionalized breastfeeding support. There are numerous drivers behind the increased medicalization of this support. Breastfeeding support, which is provided through the health care system, has been impacted by health care reforms which reinforce the medical model through reduced funding, staffing cuts, standardized care and shorter hospital stays. Their responses and narratives provide insight into how breastfeeding support can contribute to the disparity between their expectations and the reality of their breastfeeding experience. My data suggest that breastfeeding, through interactions with support providers, is often recreated as a technically challenging process which requires medical and expert intervention.

The majority of my participants relied heavily on breastfeeding support programs and experienced breastfeeding challenges which they frequently described as being unexpectedly difficult. The women in my study often described both medicalized and demedicalized discourses, practices and identities which created a challenging environment to navigate and significantly impacted their breastfeeding experience. While experiencing some demedicalizing

practices, overwhelmingly, the responses and narratives from my study point to increasingly medicalized, professionalized breastfeeding support.

My data suggest that medicalized births made the women particularly vulnerable to continued medicalization through breastfeeding support. Baby-Friendly Initiative practices worked to demedicalize the breastfeeding experience in hospital but results were uneven and the medicalization of birth and infant care protocols often dominated in the medicalized environment within which these women began to breastfeed. My study results reveal that formula, which health discourses state is harmful to a baby's health and to continued breastfeeding practice, was used frequently by health care providers under a medical provision.

Lactation consultants, who have grown in number and prominence, were a source of breastfeeding support for the majority of my study participants. The narratives describe lactation consultants who provided medicalized, professionalized support. This new version of breastfeeding support often used expert intervention, formula and medical devices, which often further complicated the women's breastfeeding experiences. My data also provide insight into the use of pharmaceuticals, particularly Domperidone, to support breastfeeding. The narratives convey the power of pro-breastfeeding discourses and the ideal of the breastfeeding mother to motivate women to use this medicalized path to achieve their breastfeeding goals.

The majority of participants in my study experienced medicalized births, medical formula use and interacted with lactation consultants. These contemporary forces can significantly shape these women's breastfeeding experiences.

Study Contributions

In examining women's experiences with breastfeeding support, this study has provided insight into the implications of the nature of this support and how this support is experienced by these women.

Medical and scientific research has begun to investigate the potential impact of birth interventions on breastfeeding outcomes, but this type of research predominately focuses on outcomes and tends to strip the context or ignore the social aspect of a topic (Armstrong 2015). Social science research can extend and contextualize these findings to explore the impact of birth interventions on women's experiences of breastfeeding. The goal of my study was to add to the social science literature and advance our understanding on how medical and professional forces can shape women's breastfeeding experiences.

My study highlighted the potential implications of medical formula supplementation, especially for women who want to exclusively breastfeed. The lack of scholarship on this particular topic may be attributed to the fact that both women's increased desire to exclusively breastfeed and BFI designation, with its required restrictions on formula use, are fairly recent phenomena. With the increasing number of women who want to exclusively breastfeed and the political support behind BFI, more research in this area is much needed.

The use of medical technology to support breastfeeding is increasing, however, there is little research on this aspect of breastfeeding support, and my goal is that my findings contribute to the literature on this topic. In addition, a gap exists in the critical scholarship of professionalization on the impact of professionalization on the client. I hope my findings provide insight on how women experience this professionalized support.

Most of the research on the impact of medicalized and professionalized breastfeeding support has been conducted in Australia, and recently Torres in the United States has explored medicalization and the lactation consultant profession. However, these topics are largely unexplored by researchers in Canada. Much of the growing body of research on women's health is conducted in other countries, but research situated in the Canadian context is crucial as the environment shapes both women's health and the care they receive (Armstrong 2015). With increased political support behind BFI designation for hospitals and health care facilities and the growing influence of lactation consultants, studies which examine these health care reforms in the Canadian context are necessary.

Strengths and Limitations

The most significant strength of this study was its use of a mixed methods approach. By using both quantitative and qualitative data this work has benefited from statistical information and contextual insights on women's experiences with breastfeeding support programs. My analysis suggests that through the synthesis of interview, survey, and regional data my study was able to provide a deeper and broader understanding of contemporary breastfeeding support programs and their impact on the women's breastfeeding experiences.

Through insights from critical scholarship on medicalization and professionalization this study aimed to build on previous research in a number of ways, most notably through adding to the literature on how the conflicting discourses and practices of medicalized and professionalized breastfeeding support can shape women's breastfeeding experiences.

There are a number of limitations to this study. The lack of key demographic information, small sample size, single location and convenience recruitment techniques all limit the ability of the findings to be applied generally to the population. The sample for this study was fairly

homogeneous; therefore the experiences of all breastfeeding women are not well represented in this study. The self-reported nature of the data collection methodology used for the interviews and surveys may have resulted in responses influenced by a social desirability bias. Also, my study only interviewed breastfeeding women, not health care providers, therefore only presented the women's perspectives on breastfeeding and breastfeeding support. In addition, as a master's thesis, the scope of this study was restricted by the resources available.

As acknowledged earlier, social, economic and cultural factors have a strong influence on a woman's breastfeeding experience and her use of breastfeeding support programs. These factors were not in scope for this particular study, which may also limit the applicability of the results.

Directions for Future Research

The results of my study and review of the literature have illuminated numerous opportunities for future research. As discussed, the scope of my study was limited by time and resources; expanding the scope by including a larger, more diverse sample, multiple geographic locations and a more robust recruitment strategy would deepen our understanding of how breastfeeding support programs can shape women's breastfeeding experiences. In addition, an expanded scope would allow more diverse results which could be compared and contrasted.

More research is also needed to investigate the impact of health care provider formula supplementation and the potential misuse of the medical indication of formula supplementation in BFI Step Six. The frequency of medical formula use, as demonstrated in my data, suggests that these practices have wide implications and require further investigation. Also, much insight could be gained from examining the experiences of health care providers, particularly lactation consultants, who provide breastfeeding support in a medical, professional context. Finally, future

research would do well to devote greater attention to the use of pharmaceuticals to support breastfeeding. Such work would be especially helpful in the prevailing context of strong breastfeeding promotion and medicalized births.

References

- Abbott, A. 2001. "Sociology of Professions." Pp. 12166-12169 in *International Encyclopedia of the Social & Behavioral Sciences*, in N. J. Smelser and P. B. Bates eds. Elsevier Science Ltd. London, England.
- Adams, Cheryll, et al. 2016. "Open letter on the current crisis in breastfeeding in the UK – UK mothers are being let down." [Press Release] Retrieved May 18, 2016.
<https://ukbreastfeeding.org/press-release/>
- Adams, Tracey. 2003. "Professionalization, Gender and Female-dominated Professions: Dental Hygiene in Ontario." *The Canadian Review of Sociology and Anthropology* 40(3):267-289.
- Amedee, Peret FJA. 2013. "Pain management for women in labour: an overview of systematic reviews." *The WHO Reproductive Health Library* Geneva, World Health Organization.
- Andrews, Therese and Stephanie Knaak. 2013. "Medicalized mothering: experiences with breastfeeding in Canada and Norway." *The Sociological Review* 61:88-110.
- Apple, Rima. 1994. "The Medicalization of Infant Feeding in the United States and New Zealand: Two Countries, One Experience." *Journal of Human Lactation* 10(1):31-37.
- Armstrong, Pat. 1993. Professions, Unions, or What?: Learning from Nurses. in McDermott and Briskin eds. *Women Challenging Unions: Feminism, Democracy and Militancy*. University of Toronto Press, Toronto, ON.
- . 2015. Introduction in Armstrong and Pederson eds. *Women's Health Intersections of Policy, Research, and Practice*. Women's Press, Toronto, ON.
- Armstrong, Pat and Hugh Armstrong. 2010. *Wasting Away: The Undermining of Canadian Health Care*. Oxford University Press. Don Mills, ON.
- Avishai, Orit. 2007. "Managing the Lactating Body: The Breast-Feeding Project and Privileged Motherhood." *Qualitative Sociology* 30:135-152.
- Babbie, Earl and Lucia Benaquisto. 2010. *Fundamentals of Social Research*. Nelson Education Ltd. Toronto, ON.
- Babcock, Katie. 2015. "New Guidance for Breastfeeding Mothers on Medication." University of Toronto, Faculty of Medicine. News. Retrieved June 5, 2016.
<http://www.medicine.utoronto.ca/news/new-guidance-breastfeeding-mothers-medication>

- Barclay, Lesley, Jo Longman, Virginia Schmied, Athena Sheehan, Margaret Rolfe, Elaine Burns and Jennifer Fenwick. 2012. "The professionalising of breast feeding – Where are we a decade on?" *Midwifery* 28:281-290.
- Beake, Sarah, Carol Pellowe, Fiona Dykes, Virginia Schmied and Debra Bick. 2012. "A systematic review of structured compared with non-structured breastfeeding programmes to support the initiation and duration of exclusive and any breastfeeding in acute and primary health care settings." *Maternal and Child Nutrition* 8:141-161.
- Belfort, Mandy, Sheryl Rifas-Shiman, Ken Kleinman, Lauren Guthrie, David Bellinger, Elsie Taveras, Matthew Gillman and Emily Oken. 2013. "Infant Feeding and Childhood Cognition at Ages 3 and 7 Years. Effects of Breastfeeding Duration and Exclusivity." *JAMA Pediatrics* 167(9):836-844.
- Best Start Resource Centre & Baby-Friendly Initiative Ontario. 2013. "The Baby-Friendly Initiative: Evidence-informed key messages and resources." Toronto, ON.
- Best Start Resource Centre. 2014. "Breastfeeding Matters - An Important Guide to Breastfeeding for Women and their Families." Retrieved January 23, 2016.
<http://www.beststart.org/cgi-bin/commerce.cgi?preadd=action&key=B04-E>
- . 2015. "My Breastfeeding Guide." Retrieved January 4, 2016.
<http://www.beststart.org/cgi-bin/commerce.cgi?preadd=action&key=B20-E>
- . 2016. "Best Start Resources." Retrieved May 2, 2016. <http://www.beststart.org/cgi-bin/commerce.cgi?search=action&category=B00E&advanced=yes&sortkey=sku&sortorder=descending>
- Biro, Mary Anne, Georgina Ann Sutherland, Jane Susanne Yelland, Pollyanna Hardy and Stephanie Janne Brown. 2011. "In-Hospital Formula Supplementation of Breastfed Babies: A Population-Based Survey." *Birth* 38(4):302-310.
- Bozzo, Pina, Gideon Koren and Shinya Ito. 2012. "Motherisk Update: Health Canada Advisory on Domperidone." *Canadian Family Physician* 58:952-953.
- Braimoh, Jessica and Lorraine Davies. 2014. "When 'breast' is no longer 'best': Post-partum constructions of infant-feeding in the hospital." *Social Science & Medicine* 123:82-89.
- Breastfeeding Committee for Canada. 2011. "Business Case for Baby-Friendly Initiative." Retrieved August 3, 2016.
http://www.breastfeedingcanada.ca/documents/BCC_BFI_20130127_Business_Case_for_BFI_Paper_English.pdf

- , 2012. “BCC BFI Practice Outcomes Indicators for Hospitals and Community Health Services.” Retrieved June 13, 2015. http://www.breastfeedingcanada.ca/documents/2012-05-14_BCC_BFI_Ten_Steps_Integrated_Indicators.pdf
- , 2014. “Baby-Friendly Initiative in Canada. Status Report.” Retrieved June 1, 2016. <http://www.breastfeedingcanada.ca/documents/BFI%20Status%20Report%202014%20with%20WHO%20Country%20report.pdf>
- , 2015. “Baby-Friendly Facilities in Canada.” Retrieved June 19, 2015. [http://www.breastfeedingcanada.ca/documents/Designated%20facilities%20in%20Canada%20\(November%202015\).pdf](http://www.breastfeedingcanada.ca/documents/Designated%20facilities%20in%20Canada%20(November%202015).pdf)
- Brimdyr K., K. Cadwell, AM. Widström, K. Svensson, M. Neumann, E. Hart, Harrington and R. Phillips. 2015. “The Association Between Common Labor Drugs and Suckling When Skin-to-Skin During the First Hour After Birth.” *Birth* 42(4):319-28.
- Brint, Steven. 1993. “Eliot Freidson’s Contribution to the Sociology of Professions.” *Work and Occupations* 20(3):259-278.
- Brodribb, Wendy, Sue Kruske, and Yvette D. Miller. 2013. “Baby-Friendly Hospital Accreditation, In-Hospital Care Practices, and Breastfeeding.” *Pediatrics* 131(4):685-692.
- Brown, Catherine, Linda Dodds, Rebecca Attenborough, Janet Bryanton, Annette Elliott Rose, Gordon Flowerdew, Donald Langille, Leanne Lauzon and Sonia Semenic. 2013. “Rates and determinants of exclusive breastfeeding in first 6 months among women in Nova Scotia: a population-based cohort study.” *Canadian Medical Association Journal* 9-17.
- Burns, Elaine, Virginia Schmied, Athena Sheehan and Jennifer Fenwick. 2010. “A meta-ethnographic synthesis of women’s experience of breastfeeding.” *Maternal and Child Nutrition* 6:201-219.
- Canadian Institute for Health Information (CIHI). 2004. “Giving Birth in Canada: A Regional Profile.” Retrieved June 28, 2016. <https://secure.cihi.ca/estore/productFamily.htm?pf=PFC415&lang=en&media=0>
- , 2015. “Inpatient Hospitalizations, Surgeries, Newborns and Childbirth Indicators, 2014–2015.” Retrieved June 28, 2016. <https://secure.cihi.ca/estore/productSeries.htm?pc=PCC226>
- Canadian Paediatric Society. 2012. “The Baby-Friendly Initiative: Protecting, promoting and supporting breastfeeding.” Nutrition and Gastroenterology Committee and Hospital Paediatrics Section, *Position Statement*.

- , 2016. "Guidelines for detection, management and prevention of hyperbilirubinemia in term and late preterm newborn infants." Fetus and Newborn Committee, *Position Statement*.
- Carroll, Katherine and Kerreen Reiger. 2005. "Fluid experts: Lactation consultants as postmodern professional specialists." *Health Sociology Review* 14:101-110.
- CBC News. 2012. "Domperidone safety alert issued by Health Canada." Retrieved June 7, 2016. <http://www.cbc.ca/news/health/domperidone-safety-alert-issued-by-health-canada-1.1233078>.
- Chalmers, Beverley. 2004. "The Baby Friendly Hospital Initiative: Where next?" *British Journal of Obstetrics and Gynaecology* 111:198-199.
- , 2013. "Breastfeeding unfriendly in Canada?" *Canadian Medical Association Journal* 185(5).
- Chalmers, Beverley and Susie Dzakpasu. 2015. "Interventions in labour and birth and satisfaction with care: The Canadian Maternity Experiences Survey Findings." *Journal of Reproductive and Infant Psychology* 33(4):374-387.
- Chalmers, Beverley, Janusz Kaczorowski, Elizabeth Darling, Maureen Heaman, Deshayne B. Fell, Beverley O'Brien, and Lily Lee. 2010. "Caesarean and Vaginal Birth in Canadian Women: A Comparison of Experiences." *Birth* 37(1)44-49.
- Chantry, Caroline, C. R. Howard and P. Auinger. 2006. "Full breastfeeding duration and associated decrease in respiratory tract infection in US children." *Pediatrics* 117(2):425-32.
- Chantry, Caroline, Laurie A. Nommsen-Rivers, Janet M. Pearson, Roberta J. Cohen and Kathryn G. Dewey. 2011. "Excess Weight Loss in First-Born Breastfed Newborns Relates to Maternal Intrapartum Fluid Balance." *Pediatrics* 127(1):171-179.
- Chantry, Caroline, Kathryn Dewey, Janet M. Pearson, Erin A. Wagner and Laurie A. Nommsen-Rivers. 2014. "In-Hospital Formula Use Increases Early Breastfeeding Cessation Among First-Time Mothers Intending to Exclusively Breastfeed." *The Journal of Pediatrics* 64:1339-1345.
- Chaput, Kathleen, Alberto Nettel-Aguirre, Richard Musto, Carol Adair and Suzanne Tough. 2016. "Breastfeeding difficulties and supports and risk of postpartum depression in a cohort of women who have given birth in Calgary: a prospective cohort study." *Canadian Medical Association Journal Open* 4(1):103-109.
- Chien, Li-Yin, Chen-Jei Tai, Kuei-Hui Chu, Yi-Li Ko and Yueh-Chi Chiu. 2007. "The number of Baby Friendly hospital practices experienced by mothers is positively associated with

- breastfeeding: A questionnaire survey.” *International Journal of Nursing Studies* 44:1138-1146.
- Choiniere, Jacqueline. 2011. “Accounting for Care. Exploring Tensions and Contradictions.” *Advances in Nursing Science* 34(4):330-344.
- Conrad, Peter. 1975. “The Discovery of Hyperkinesis: Notes on the Medicalization of Deviant Behavior.” *Social Problems* 23(1):12-21.
- , 1992. “Medicalization and Social Control.” *Annual Review of Sociology* 18:209-32.
- , 2007. *The Medicalization of Society*. The John Hopkins University Press, Baltimore, MD.
- Conrad, Peter and Joseph W. Schneider. 1980. *Deviance and Medicalization: From Badness to Sickness*. Temple University Press. Philadelphia, PA.
- Coxon, Kirstie, Jane Sandalla and Naomi J. Fulop. 2014. “To what extent are women free to choose where to give birth? How discourses of risk, blame and responsibility influence birth place decisions.” *Health, Risk & Society* 16(1):51–67.
- Cricco-Lizza, Roberta. 2009. “Formative infant experiences and education of NICU nurses.” *The American Journal of Maternal Child Nursing* 34:236–242.
- , 2016. “Infant Feeding Beliefs and Day-to-Day Feeding Practices of NICU Nurses.” *Journal of Pediatric Nursing* 31:91-98.
- Davey, MA. and J. King. 2016. “Caesarean section following induction of labour in uncomplicated first births- a population-based cross-sectional analysis of 42,950 births.” *BMC Pregnancy Childbirth* 16(1):1-9.
- Davis, Joseph. 2006. “How Medicalization Lost Its Way.” *Society* 43(6):51-56.
- Davis-Floyd, Robbie, Ivy-Lynn Bourgeault and Cecilia Benoit. 2004. *Reconceiving midwifery*. McGill-Queen’s University Press, Montreal, QC.
- Declercq, Eugene, Miriam Lobbok, Carol Sakala and Mary Ann O’Hara. 2009. “Hospital Practices and Women’s Likelihood of Fulfilling Their Intention to Exclusively Breastfeed.” *American Journal of Public Health* 99(5):929-935.
- Dennis, Cindy-Lee. 2003. “The breastfeeding self-efficacy scale: Psychometric assessment of the short form.” *Journal of Obstetric, Gynecologic, and Neonatal Nursing* 32(6):734-44.
- , 2006. “Identifying Predictors of Breastfeeding Self-Efficacy in the Immediate Postpartum Period.” *Research in Nursing & Health* 29:256–268.

- DiGirolamo, Ann, Laurence M. Grummer-Strawn and Sara B. Fein. 2008. "Effect of Maternity-Care Practices on Breastfeeding." *Pediatrics* 122(2):43-49.
- Dunn, Sheila, Michelle Wise, Lina Johnson, Geoffrey Anderson, Lorraine E. Ferris, Naira Yeritsyan, Ruth Croxford, Longdi Fu, Naushaba Degani and Arlene S. Bierman. 2010. Reproductive & Gynaecological Health In: Bierman AS, ed. *Project for an Ontario Women's Health Evidence-Based Report: Volume 2*. Toronto, ON.
- Eden, Aimee. 2012. New Professions and Old Practices: Lactation Consulting and the Medicalization of Breastfeeding in Smith et al. eds. *Beyond Health, Beyond Choice*. Rutgers University Press. New Brunswick, NJ.
- . 2013. "The Professionalization and Practice of Lactation Consulting: Medicalized Knowledge, Humanistic Care." PhD Dissertation, Department of Community and Family Health, University of South Florida. Retrieved from ProQuest Dissertations & Theses Database, 3557834.
- Freidson, Eliot. 1970. *Profession of Medicine*. University of Chicago Press. Chicago, Ill.
- . 1984. "The Changing Nature of Professional Control." *Annual Review of Sociology* 10:1-20.
- . 1986. *Professional Powers*. University of Chicago Press. Chicago, Ill.
- French, Cynthia, Xiaomei Cong and Keun Sam Chung. 2016. "Labor Epidural Analgesia and Breastfeeding: A Systematic Review." *Journal of Human Lactation* 32(3):507 –520.
- Gagnon, Anita, Guylaine Leduc, Kathy Waghorn, Hong Yang and Robert W. Platt. 2005. "In-Hospital Formula Supplementation of Healthy Breastfeeding Newborns." *Journal of Human Lactation* 21(4):397-405.
- Glaser, Barney and Anselm Strauss. 1967. *The discovery of grounded theory: Strategies for qualitative research*. Aldine De Gruyter Publishers, New York, NY.
- Grossman, Xena, Jana Chaudhuri, Lori Feldman-Winter and Anne Merewood. 2012. "Neonatal Weight Loss at a US Baby-Friendly Hospital." *Journal of the Academy of Nutrition and Dietetics* 112(3):410-413.
- Grzeskowiak, Luke, Sze wen Lim, Alicia Thomas, Usha Ritchie and Andrea Gordon. 2013. "Audit of Domperidone Use as a Galactagogue at an Australian Tertiary Teaching Hospital." *Journal of Human Lactation* 29(1):32-37.
- Halfmann, Drew. 2011. "Recognizing medicalization and demedicalization: Discourses, practices and identities." *Health* 16(2):186-207.

- Halpern, Sydney and Renee Anspach. 1993. "The Study of Medical Institutions." *Work and Occupations* 20(3):279-295.
- Hannula, Leena, Marja Kaunonen and Marja-Terttu Tarkka. 2008. "A systematic review of professional support interventions for breastfeeding." *Journal of Clinical Nursing* 17:1132–1143.
- Health Canada. 2012. "Trends in Breastfeeding Practices in Canada (2001 to 2009-2010)" Retrieved April 11, 2016. <http://www.hc-sc.gc.ca/fn-an/surveill/nutrition/commun/prenatal/exclusive-exclusif-eng.php>
- , 2015a. "Infant Feeding." Retrieved February 19, 2016 <http://www.hc-sc.gc.ca/fn-an/nutrition/infant-nourisson/index-eng.php>
- , 2015b. "Summary Safety Review - DOMPERIDONE - Serious abnormal heart rhythms and sudden death (cardiac arrest)." Retrieved April 17, 2016. <http://www.hc-sc.gc.ca/dhp-mps/medeff/reviews-examens/domperidone-eng.php>
- Hegney, D, Tony Fallon and Maxine O'Brien. 2008. "Against all odds: a retrospective case-controlled study of women who experienced extraordinary breastfeeding problems." *Journal of Clinical Nursing* 17(9):1182-1192.
- Herrera-Gómez, A., O. García-Martínez, J. Ramos-Torrecillas, E. DeLuna-Bertos and F.M. Ocaña-Peinado. 2015. "Retrospective study of the association between epidural analgesia during labour and complications for the newborn." *Midwifery* 31:613-616.
- Hoddinott, Pat, Leone Craig, Jane Britten and Rhona McInnes. 2012. "A serial qualitative interview study of infant feeding experiences: idealism meets realism." *British Medical Journal Open* 2:1-14.
- Howe-Heyman, Abigail and Melanie Lutenbacher. 2016. "The Baby-Friendly Hospital Initiative as an Intervention to Improve Breastfeeding Rates: A Review of the Literature." *Journal of Midwifery and Women's Health* 61: 77–102.
- IBLCE. 2016. "Current Statistics on Worldwide IBCLCs"; "Pathways" Retrieved May 7, 2016. <http://iblce.org/>
- ILCA. 2016. "What is an IBCLC?" Retrieved May 7, 2016. <http://www.ilca.org/why-ibclc/ibclc>
- Johanson, Richard, Mary Newburn and Alison Macfarlane. 2002. "Has the medicalisation of childbirth gone too far?" *British Medical Journal* 324:892-895.
- Jones, Wendy and Sharon Breward. 2011. "Use of Domperidone to enhance lactation: what is the evidence?" *Community Practitioner* 84(6):35-37.

- Kaunonen, Marja, Leena Hannula and Marja-Terttu Tarkka. 2012. "A systematic review of peer support interventions for breastfeeding." *Journal of Clinical Nursing* 21:1943-1954.
- Kelleher, Christa. 2006. "The physical challenges of early breastfeeding." *Social Science & Medicine* 63:2727-2738.
- Kramer, Michael and Ritsuko Kakuma. 2012. "Optimal duration of exclusive breastfeeding." *Cochrane Database of Systematic Reviews* DOI: 10.1002/14651858.CD003517.pub2
- La Leche League Canada. 2016a. "About La Leche League Canada." Retrieved April 12, 2016 <http://www.lllc.ca/about>
- Labbok, Miriam. 2012. Breastfeeding in Public Health in Smith et al. eds. *Beyond Health, Beyond Choice*. Rutgers University Press. New Brunswick, NJ.
- Lamp, Jane and Judi Macke. 2010. "Relationships Among Intrapartum Maternal Fluid Intake, Birth Type, Neonatal Output, and Neonatal Weight Loss During the First 48 Hours After Birth." *Journal of Obstetric, Gynecologic & Neonatal Nursing* (39):169-177.
- Larsen, Jette Schilling and Hanne Kronborg. 2013. "When breastfeeding is unsuccessful – mothers' experiences after giving up breastfeeding." *Scandinavian Journal of Caring Sciences* 27:848–856.
- Lavender, Tina, Lisa Baker, Rebecca Smyth, Stuart Collins, Anne Spofforth and Paola Dey. 2005. "Breastfeeding expectations versus reality: a cluster randomised controlled trial." *British Journal of Obstetrics and Gynaecology* 112(8):1047-1053.
- Leurer, Marie Dietrich and Eunice Misskey. 2015. "'Be positive as well as realistic': a qualitative description analysis of information gaps experienced by breastfeeding mothers." *International Breastfeeding Journal* 10(10):1-11.
- Levitt, Cheryl, Louise Hanvey, Janusz Kaczorowski, Beverley Chalmers, Maureen Heaman and Sharon Bartholomew. 2011. "Breastfeeding Policies and Practices in Canadian Hospitals: Comparing 1993 with 2007." *Birth* 38(3):228-237.
- Lewis, Seth. 2010. "Journalism Innovation and the Ethic of Participation: A Case Study of the Knight Foundation and its News Challenge." PhD Dissertation, The University of Texas at Austin. Retrieved from ProQuest Dissertations & Theses Database, 3429005.
- Lind, Jennifer, Cria Perrine and Ruowei Li. 2014. "Relationship between Use of Labor Pain Medications and Delayed Onset of Lactation." *Journal of Human Lactation* 30(2):167–173.

- Madan, Juliette, Anne Hoen, Sara Lundgren, Shohreh Farzan, Kathryn Cottingham, et al. 2016. "Association of Caesarian Delivery and Formula Supplementation with the Intestinal Microbiome of 6-Week-Old Infants." *JAMA Pediatrics* 170(3):212-219.
- Malacrida, Claudia and Tiffany Boulton. 2014. "The best laid plans? Women's choices, expectations and experiences in childbirth." *Health*. 18(1):41-59.
- Mannion, Cynthia and Deborah Mansell. 2012. "Breastfeeding Self-Efficacy and the Use of Prescription Medication: A Pilot Study." *Obstetrics and Gynecology International* 2012:1-8.
- Merriam, S. B. 2009. *Qualitative research: A guide to design and implementation*. Jossey-Bass Publishers. San Francisco, CA.
- Moreau, Denise, Marie-Blanche Tahon and Julie Daigle. 2010. "Milk and Thorns." *Feminist Research* 23(2):45-69.
- Murray, Erin, Sue Ricketts and Jennifer Dellaport. 2007. "Hospital Practices that Increase Breastfeeding Duration: Results from a Population-Based Study." *Birth* 34(3):202-210.
- Nathoo, Tasnim and Aleck Ostry. 2009. *The One Best Way? Breastfeeding History, Politics, and Policy in Canada*. Wilfred Laurier University Press. Waterloo, On.
- Newell, Lucila. 2013. "Disentangling the politics of breastfeeding." *Children's Geographies* 11(2):256-261.
- Nickel, Nathan, Miriam Labbok, Michael Hudgens and Julie Daniels. 2013. "The Extent that Noncompliance with the Ten Steps to Successful Breastfeeding Influences Breastfeeding Duration." *Journal of Human Lactation* 29(1):59-70.
- Niela-Vilén, Hannakaisa, Anna Axelin, Hanna-Leena Melender and Sanna Salanterä. 2015. "Aiming to be a breastfeeding mother in a neonatal intensive care unit and at home: a thematic analysis of peer-support group discussion in social media." *Maternal and Child Nutrition* 11:712-726.
- Noel-Weiss, Joy, A. Kirsten Woodend, Wendy E. Peterson, William Gibb and Dianne L. Groll. 2011. "An observational study of associations among maternal fluids during parturition, neonatal output, and breastfed newborn weight loss." *International Breastfeeding Journal* 6(9):1-10.
- O'Connell, Rhona and Soo Downe. 2009. "A metasynthesis of midwives' experience of hospital practice in publicly funded settings: compliance, resistance and authenticity." *Health* 13(6):589-609.

- Ogawa, K., RA. Ben, S. Pons, MI. de Paolo and L.Bustos Fernández. 1992. "Volatile fatty acids, lactic acid, and pH in the stools of breast-fed and bottle-fed infants." *Journal of Pediatric Gastroenterology and Nutrition* 15(3):246-7.
- Olsen, Wendy. 2004. Triangulation in Social Research: Qualitative Methods Can Really Be Mixed in Holborn and Ormskirk eds. *Developments in Sociology*. Causeway Press.
- Ontario Ministry of Health and Long-Term Care. 2013. "Moms and Babies to Benefit From New Breastfeeding Supports." [Press Release] Retrieved April 4, 2016.
<https://news.ontario.ca/mohlhc/en/2013/09/moms-and-babies-to-benefit-from-new-breastfeeding-supports.html>
- . 2015. "2015-16 Published Plans and 2014-2015 Annual Reports." Retrieved March 16, 2016. <http://www.health.gov.on.ca/en/common/ministry/publications/plans/ppar15/>
- Osadchy, Alla, Myla Moretti, and Gideon Koren. 2012. "Effect of Domperidone on Insufficient Lactation in Puerperal Women: A Systematic Review and Meta-Analysis of Randomized Controlled Trials." *Obstetrics and Gynecology International* 2012:1-7.
- Owen, C. G., R. M. Martin, P. H. Whincup, G.D. Smith and D.G. Cook. 2005. "Effect of infant feeding on the risk of obesity across the life course: A quantitative review of published evidence." *Pediatrics* 115(5):1367-77.
- Palmer, Gabrielle and Saskia Kemp. 1996. "Breastfeeding Promotion and the Role of the Professional Midwife." in Murray ed. *Baby Friendly/Mother Friendly: Perspectives in International Midwifery*. Mosby, London.
- Parsons, Talcott. 1951. *The Social System*. Routledge. London.
- Paul, Catherine, Marie Zenut, Agnes Dorut, Marie-Ange Coudore, Julie Vein, Jean-Michel Cardot and David Balayssac. 2015. "Use of Domperidone as a Galactagogue Drug: A Systematic Review of the Benefit-Risk Ratio." *Journal of Human Lactation* 31(1):57-63.
- Pearce, Lisa. 2012. "Mixed Methods Inquiry in Sociology." *American Behavioural Scientist* 56(6):829-848.
- Perez-Escamilla, Rafael, Josefa Martinez and Sofia Segura-Perez. 2016. "Impact of the Baby-Friendly Hospital Initiative on breastfeeding and child health outcomes: a systematic review." *Maternal and Child Nutrition* doi: 10.1111/mcn.12294.
- Perrine, Cria, Kelley Scanlon, Ruowei Li, Erika Odom and Laurence Grummer-Strawn. 2012. "Baby-Friendly Hospital Practices and Meeting Exclusive Breastfeeding Intention." *Pediatrics* 130(1):54-60.

- Pincombe, Jan, Peter Baghurst, Georgia Antoniou, Brian Peet, Ann Henderson and Edith Reddin. 2006. "Baby Friendly Hospital Initiative practices and breast feeding duration in a cohort of first-time mothers in Adelaide Australia." *Midwifery* (24):55-61.
- Public Health Agency of Canada. 2012. "The Sensible Guide to a Healthy Pregnancy." Retrieved June 22, 2016. <http://www.phac-aspc.gc.ca/hp-gs/guide/assets/pdf/hpguide-eng.pdf>
- Ransjo-Arvidson AB., AS. Matthiesen, G.Lilja, E. Nissen, AM. Widstrom and K. Uvnas-Moberg. 2001. "Maternal analgesia during labor disturbs newborn behavior: effects on breastfeeding, temperature, and crying." *Birth* 28(1):5-12.
- Read, Jen'nan Ghazal and Bridget K. Gorman. 2010. "Gender and Health Inequality." *Annual Review of Sociology* 36:371-86.
- Reddin, Edith, Jan Pincombe and Philip Darbyshire. 2007. "Passive resistance: Early experiences of midwifery students/graduates and the Baby Friendly Health Initiative 10 steps to successful breastfeeding." *Women and Birth* 20:71-76.
- Renfrew, Mary, Felicia McCormick, Angela Wade, Beverley Quinn and Therese Dowswell. 2012. "Support for healthy breastfeeding mothers with healthy term babies." *Cochrane Database of Systematic Reviews* DOI: 10.1002/14651858.CD001141.pub4.
- Rosenberg, Kenneth, John Stull, Michelle Adler, Laurin Kasehagen and Andrea Crivelli-Kovach. 2008. "Impact of Hospital Policies on Breastfeeding Outcomes." *Breastfeeding Medicine* 3(2):110-116.
- Saadeh, Randa. 2012. "The Baby-Friendly Hospital Initiative 20 Years On: Facts, Progress, and the Way Forward." *Journal of Human Lactation* 28(3):272-275.
- Schmied, Virginia, Sarah Beake, Athena Sheehan, Christine McCourt and Fiona Dykes. 2011. "Women's Perceptions and Experiences of Breastfeeding Support: A Meta-Synthesis." *Birth* 38(1):49-59.
- Schmied, Virginia, Gillian Thomson, Anna Byrom, Elaine Burns, Athena Sheehan and Fiona Dykes. 2014. "A meta-ethnographic study of health care staff perceptions of the WHO/UNICEF Baby Friendly Health Initiative." *Women and Birth* 27:242-249.
- Schulte, Brigid. 2014. "More U.S. hospitals adopting 'baby-friendly' policies." *Washington Post*. September 10, 2014. Retrieved April 26, 2016. https://www.washingtonpost.com/local/more-us-hospitals-adopting-baby-friendly-policies/2014/09/10/49a86998-34c4-11e4-a723-fa3895a25d02_story.html
- Semenic, Sonia, Carmen Loiselle and Laurie Gottlieb. 2008. "Predictors of the Duration of Exclusive Breastfeeding Among First-Time Mothers." *Research in Nursing & Health* 31:428-441.

- Semenic, Sonia, Janet Childerhose, Julie Lauziere and Danielle Groleau. 2012. "Barriers, Facilitators and Recommendations Related to Implementing the Baby-Friendly Initiative (BFI): An Integrative Review." *Journal of Human Lactation* 28(3):317-334.
- Sheehan, Athena, Virginia Schmied and Lesley Barclay. 2009. "Women's experiences of infant feeding support in the first 6 weeks post-birth." *Maternal and Child Nutrition* 5:138-150.
- Sheehan, Athena and Virginia Schmied. 2011. The Imperative to Breastfeed: An Australian Perspective in Liamputtong ed. *Infant Feeding Practices*. Springer Science+Business Media LLC.
- Sim, Tin Fei, Laetitia Hattingh, Jillian Sherriff and Lisa Tee. 2015. "The Use, Perceived Effectiveness and Safety of Herbal Galactogogues During Breastfeeding: A Qualitative Study." *International Journal of Environmental Research and Public Health* 12:11050-11071.
- Sinha, Bireshwar, Ranadip Chowdhury, M. Jeeva Sankar, Jose Martines, Sunita Taneja, Sarmila Mazumder, Nigel Rollins, Rajiv Bahl and Nita Bhandari. 2015. "Interventions to improve breastfeeding outcomes: a systematic review and meta-analysis." *Acta Paediatrica* 104:114-135.
- Sundercombe, Samantha, Camille Raynes-Greenow, Robin Turner and Heather Jeffrey. 2014. "Do neonatal hypoglycaemia guidelines in Australia and New Zealand facilitate breast feeding?" *Midwifery* <http://dx.doi.org/10.1016/j.midw.2014.04.004>
- Szasz, Thomas. 1960. "The myth of mental illness." *American Psychologist* 15:113-118.
- Taveras, Elsie, Ruowei Li, Laurence Grummer-Strawn, Marcie Richardson, Richard Marshall, and Virginia H. Rego. 2004. "Mothers' and clinicians' perspectives on breastfeeding counseling during routine preventive visits." *Pediatrics* 113(5):405-411.
- Texas Ten Steps. 2016. "Texas Ten Steps Star Achiever." Retrieved May 12, 2016. http://texastenstep.org/starachiever-texastenstep/Star_Achiever_Ten_Step_Modules/resources-and-tools/docs/Texas%20Ten%20Step%20Star%20Achiever%20Training%20ToolKit_Entire%20Toolkit.pdf
- The Hospital for Sick Children. 2016. "Drugs and Breastfeeding." Retrieved June 2, 2016. <http://www.sickkids.ca/Research/Drugs-Breastfeeding/index.html>
- Thomson, Gill and Fiona Dykes. 2011. "Women's Sense of Coherence related to their infant feeding experiences." *Maternal and Child Nutrition* (7):160-174.

- Torres, Jennifer. 2013. "Breast milk and labour support: Lactation consultants' and doulas' strategies for navigating the medical context of maternity care." *Sociology of Health and Illness* 35(6):924–938.
- , 2014. "Medicalizing to demedicalize: Lactation consultants and the (de)medicalization of breastfeeding." *Social Science & Medicine* 100:159-166.
- , 2015. "Families, Markets, and Medicalization: The Role of Paid Support for Childbirth and Breastfeeding." *Qualitative Health Research* 25(7):899-911.
- Ulin, Priscilla, Elizabeth Robinson and Elizabeth Tolley. 2005. *Qualitative methods in public health: a field guide for applied research*. Jossey-Bass Publishers, San Francisco, CA.
- Waggoner, Miranda. 2011. "Monitoring Milk and Motherhood: Lactation Consultants and the Dilemmas of Breastfeeding Advocacy." *International Journal of Sociology of the Family* 37(1):153-171.
- Whelan, Amanda and Phillipa Lupton. 1998. "Promoting successful breast feeding among women with a low income." *Midwifery* 14(2):94-100.
- Wiklund I., M. Norman, K. Uvnas-Moberg, AB. Ransjo-Arvidson and E. Andolf. 2009. "Epidural analgesia: breast-feeding success and related factors." *Midwifery* 25(2):31-38.
- Williamson, Iain, Dawn Leeming, Steven Lyttle and Sally Johnson. 2012. "'It should be the most natural thing in the world': exploring first-time mothers' breastfeeding difficulties in the UK using audio-diaries and interviews." *Maternal and Child Nutrition* 8:434-447.
- Witz, Anne. 1992. *Professions and Patriarchy*. Routledge, New York.
- Wolf, Jacqueline. 2012. Pediatrics, Obstetrics, and Shrinking Maternal Authority. in Smith et al. eds. *Beyond Health, Beyond Choice*. Rutgers University Press. New Brunswick, NJ.
- Wootton, Barbara. 1959. *Social Science and Social Pathology*. Allen & Unwin. California.
- World Health Organization (WHO). 1998. "Evidence for the ten steps to successful breastfeeding." Retrieved August 2, 2016
http://www.who.int/nutrition/publications/evidence_ten_step_eng.pdf
- WHO/UNICEF. 1981. "International Code of Marketing of Breast-Milk Substitutes." Retrieved June 5, 2015. <http://www.who.int/nutrition/publications/infantfeeding/9241541601/en/>
- , 2009a. *Baby-friendly hospital initiative: revised, updated and expanded for integrated care*. WHO Document Production Services, Geneva, Switzerland.

- . 2009b. *Acceptable Medical Reasons for Use of Breast-milk Substitutes*. WHO Document Production Services, Geneva, Switzerland.
- . 2016. "The Baby-Friendly Hospital Initiative." Retrieved February 22, 2016.
<http://www.who.int/nutrition/topics/bfhi/en/>
- Yam, Bernard. 2004. "From vocation to profession: the quest for professionalization of nursing." *British Journal of Nursing* 13(16):978-982.
- Zola, Ivan. 1972. "Medicine as an Institution of Social Control." *Sociological Review* 20:487-504.
- n.d. "Exclusive Breastfeeding: Isn't Some Breastfeeding Good Enough?" Retrieved May 23, 2016.
- 2005. "Breastfeeding Practices in the Region of 2004/05." Retrieved May 23, 2016.
- 2010a. "Breastfeeding Practices in the Region of 2009/10." Retrieved May 23, 2016.
- 2010b. "Born in: Examining Maternal and Infant Health." Retrieved May 16, 2016.
- 2010c. "Formula Supplementation for Newborns in Region Hospitals." Retrieved June 3, 2016.
- 2014. "Infant Feeding Surveillance System Report." Retrieved December 4, 2015.

APPENDIX A: Ethics Approval Forms



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Certificate #:	STU 2015 - 113
Amendment Approved:	10/14/15
Approval Period:	08/18/15-08/18/16

Memo

To: Gillian Elliott, Sociology - Graduate Program, elliottg@yorku.ca

From: Alison M. Collins-Mrakas, Sr. Manager and Policy Advisor, Research Ethics
(on behalf of Denise Henriques, Acting-Chair, Human Participants Review Committee)

Date: **Wednesday, October 14, 2015**

Re: Ethics Approval

The Impact of in-Hospital Programs on Breastfeeding Exclusivity and Duration

With respect to your research project entitled, "The Impact of in-Hospital Programs on Breastfeeding Exclusivity and Duration", the committee notes that, as there are no substantive changes to either the methodology employed or the risks to participants in the research project or any other aspect of the project, a renewal of approval re the proposed amendments to the above project is granted.

Should you have any questions, please feel free to contact me at: 416-736-5914 or via email at: acollins@yorku.ca.

Yours sincerely,

Alison M. Collins-Mrakas M.Sc., LLM
Sr. Manager and Policy Advisor,
Office of Research Ethics



AMENDMENT

RESEARCH ETHICS: PROCEDURES to ENSURE ONGOING COMPLIANCE

Upon receipt of an ethics approval certificate, researchers are reminded that they are required to ensure that the following measures are undertaken so as to ensure on-going compliance with Senate and TCPS ethics guidelines:

1. **RENEWALS:** Research Ethics Approval certificates are subject to annual renewal. Certificates **must be current** in order for research activities to continue.
 - a. Researchers are required to submit a request for renewal to the Office of Research Ethics (ORE) for review and approval prior to the expiry of the certificate.
 - b. **Failure to renew an ethics approval certificate or (to notify ORE that no further research involving human participants will be undertaken) may constitute a breach of Senate Policy on research involving human participants.**
2. **AMENDMENTS:** Amendments must be reviewed and approved **PRIOR** to undertaking/making the proposed amendments to an approved ethics protocol;
3. **END OF PROJECT:** ORE must be notified when a project is complete;
4. **ADVERSE EVENTS:** Adverse events must be reported to ORE as soon as possible;
5. **AUDIT:**
 - a. More than minimal risk research may be subject to an audit as per TCPS guidelines;
 - b. A spot sample of minimal risk research may be subject to an audit as per TCPS guidelines.

FORMS: As per the above, the following forms relating to on-going research ethics compliance are available on the Research website:

- a. Renewal
- b. Amendment
- c. End of Project
- d. Adverse Event

[Redacted]

October 5, 2015

RE: The Impact of in-Hospital Programs on Breastfeeding Exclusivity and Duration

Dear [Redacted],

This letter is in response to the additional information provided by Gillian Elliott via email (dated October 1st 2015), related to her project entitled "The Impact of in-Hospital Programs on Breastfeeding Exclusivity and Duration".

The researcher is requesting assistance with recruitment of potential participants through [Redacted] program. The [Redacted] staff will provide eligible clients with recruitment material and interested clients will contact the researcher directly.

The researcher has adequately addressed all of the issues identified by the Research Review Committee during the administrative review (see letters dated August 27th 2015 and September 28th 2015).

The project protocol does not provide enough information about the methodology to allow for an assessment of the usefulness of the results for [Redacted] Public Health.

The Research Review Committee is available to provide additional guidance and support for this project, as required.

If you have any questions or concerns, please feel free to contact either [Redacted] (ext. [Redacted]) or myself.

Sincerely,

[Redacted Signature]

[Redacted]

APPENDIX B: Interview Guide

The Impact of in-Hospital Programs on Breastfeeding Outcomes

Research Interview Guide

General:

1. Where in do you live?
2. Is this your first baby? Second? Third? Fourth?
3. How old is your baby?
4. Prior to giving birth, how did you intend to feed your baby?
5. If you intended to breastfeed: Prior to giving birth, how would you have rated your confidence in your ability to breastfeeding?

Experience in hospital:

1. Tell me about your birth experience.
 - a. Did you deliver your baby in a hospital in Region?
 - b. Who attended at the birth?
 - c. Was the birth vaginal, caesarian?
 - d. If a vaginal birth, did you experience any interventions?
 - e. When in the gestation period was your baby born?
 - f. Did you or your baby have a medical condition (pre or post birth) that would interfere with breastfeeding?
 - g. How many hours/days after birth were you discharged from hospital?
2. Did you experience skin-to-skin contact?
 - a. Immediate skin-to-skin?
 - b. Frequent skin-to-skin?
 - c. Do you feel it was beneficial, detrimental or had no effect on your breastfeeding experience? Why?
3. Tell me about your experiences with breastfeeding.
 - a. Did you initiate breastfeeding within hours of birth?
 - b. Did the hospital staff promote cue-based breastfeeding/ breastfeeding on-demand?
4. Did your baby room-in with you?
 - a. If so, was this beneficial, detrimental or had no effect on your breastfeeding experience?
5. Did you use a pacifier in hospital?
 - a. If yes, was it beneficial, detrimental or had no effect on your breastfeeding experience?
6. Tell me about your experiences with Nurses and/or Lactation Consultants in the hospital with regards to breastfeeding support/advice/education.

- a. Was this support/advice beneficial, detrimental or had no effect on your breastfeeding experience? How?
 - b. Do you feel you received adequate support from hospital staff?
 - c. If not, why do you think you didn't receive adequate support? (Only if prompt required) E.g. Did you feel they were too busy?
 - d. If you could have used more assistance, what type of assistance would have been most beneficial?
7. Did your hospital offer a breastfeeding class?
 - a. Did you attend? Why or why not?
 - b. If yes, tell me about your experience with this class.
 - c. Was it beneficial, detrimental or had no effect on your breastfeeding experience?
 8. Tell me about your experiences with formula while in the hospital.
 - a. If your baby received formula while in hospital, was it beneficial, detrimental or had no effect on your breastfeeding experience? Why?
 9. Tell me about your experiences with post-discharge breastfeeding support programs.
 - a. Were programs you participated in beneficial, detrimental or had no effect on your breastfeeding experience? How?
 10. After you were home from the hospital did you receive formula or gifts from formula companies in the mail?
 - a. Was it beneficial, detrimental or had no effect on your breastfeeding experience?
 11. Overall, do you feel the procedures you experienced in hospital had an effect on your breastfeeding experience?
 - a. How did the length of your hospital stay affect your breastfeeding experience?
 12. Overall, do you feel hospitals are doing what they should to support breastfeeding?
 - a. What should be changed?
 - b. What should be added?
 - c. What should not be done?
 13. Was receiving support and education about breastfeeding in the hospital is the best time? Why. If not then, when? Or should it be prenatally? Or post-discharge?
 14. At hospital discharge, how would you have rated your confidence in your ability to breastfeed?
 15. Two weeks post-partum, how would you have rated your confidence in your ability to breastfeed?

Breastfeeding Experience:

1. Tell me about your breastfeeding experience since leaving the hospital.
 - a. Exclusive or formula supplementation?
 - b. Are you currently breastfeeding?

- c. If no, how old was your baby when you stopped?
 - d. If yes, at what age of the baby do you intend to stop breastfeeding?
 - e. Have you experienced any breastfeeding difficulties?
 - i. Did you seek professional help?
 - ii. If yes, was the support/advice you received beneficial, detrimental or had no effect on your breastfeeding experience?
2. Overall, did your breastfeeding experience go as you hoped/ planned?
- a. If you were dissatisfied/unhappy with you breastfeeding experience, why?
 - b. What effect did external factors, such as spouse and family support, maternity leave, employment have on your breastfeeding experience?

**In-Hospital Practices and Infant Feeding Outcomes
PARTICIPANT SURVEY**

This study will explore the impact of in hospital practices designed to support breastfeeding and infant feeding outcomes.

Your participation in the study is completely voluntary and you may choose to stop participating at any time. Your decision not to participate will not influence your relationship with the researchers, York University or the Region of Public Health Department.

Please circle the most appropriate answer(s).

GENERAL:			
Where do you live?
How old were you when your baby was born?		years	
Is this your first baby?	Yes	No, 2nd, 3rd, 4th, 5th, 6th, + (please circle)	
How old is your baby now?		weeks or months (please circle)	
Which hospital did you deliver at? Hospital Hospital Hospital
Who delivered your baby?	Doctor	Midwife	Other
Was your birth:	Vaginal	Caesarian (C-section)	
If you had a vaginal birth, did you experience any of these?	Epidural	Induction/Pitocin	Other
Was your baby born after 37 weeks?	Yes	No	
Did you or your baby have a medical condition (pre or post birth) that would interfere with breastfeeding?	Yes	No	
Before giving birth, how did you plan to feed your baby?	Breastfeeding only	Both breastfeeding and formula feeding	Formula feeding only
If you planned to breastfeed: Before giving birth, how would you have rated your confidence in your ability to breastfeed?	Very confident	Confident	Not confident
IN-HOSPITAL PRACTICES:			
For vaginal birth: Was your naked baby placed on your skin (skin-to-skin) within 5 minutes after birth, for at least one hour?	Yes	No	Not possible due to medical reasons
For vaginal birth: If you did have skin-to-skin immediately after birth, what effect do you feel it had on your breastfeeding experience?	Positive effect	Negative effect	No effect
For caesarian birth (C-section): Was your naked baby placed on your skin (your neck and shoulders) immediately after birth while you were still in the operating room?	Yes	No	Not possible due to medical reasons
For caesarian birth (C-section): Was your naked baby placed on your skin (skin-to-skin) as soon as possible post-operation, for at least one hour?	Yes	No	Not possible due to medical reasons
For caesarian birth (C-section): If you did have skin-to-skin in the operating room or in post-operation, what effect do you feel it had on your breastfeeding experience?	Positive effect	Negative effect	No effect
Did you try to breastfeed your baby within 4 hours of birth?	Yes	No	Not possible due to medical reasons
Did the nurses promote on-demand breastfeeding (feeding the baby whenever they are hungry, Yes not on a schedule)?	Yes	No	
Did you have skin-to-skin with your baby during your hospital stay?	No	Yes, once	Yes, a few times
If you had skin-to-skin, what effect do you feel it had on your breastfeeding experience?	Positive effect	Negative effect	No effect
Did your baby remain in your room with you at all times?	Yes	Yes, except to attend minor procedures	No, my baby stayed in the nursery (NICU)

If your baby stayed in your room, what effect do you feel it had on your breastfeeding experience?		Positive effect	Negative effect	No effect
Did the hospital staff offer or give you a pacifier/soother for your baby?		Yes	No	I brought my own pacifier/soother
If you were offered or given a pacifier/soother, what effect do you feel it had on your breastfeeding experience?		Positive effect	Negative effect	No effect
Did any hospital staff help you personally, one-to-one, with breastfeeding?		Yes	No	
If yes, was it a Nurse(s) and/or Lactation Consultant(s)?		Nurse(s)	Lactation Consultant(s)	Other
If it was a Nurse(s) who helped you with breastfeeding, what effect do you feel it had on your breastfeeding experience?		Positive effect	Negative effect	No effect
If it was a Lactation Consultant(s) who helped you with breastfeeding, what effect do you feel it had on your breastfeeding experience?		Positive effect	Negative effect	No effect
Did any hospital staff show you how to express your breast milk by hand?		Yes	No	
If hospital staff showed you hand expression, what effect do you feel it had on your breastfeeding experience?		Positive effect	Negative effect	No effect
Did your hospital offer a breastfeeding class?		Yes	No	Don't know
If yes, did you attend the class?		Yes	No, I did not feel I needed the class	No, due to circumstances
If you attended the breastfeeding class, what effect do you feel it had on your breastfeeding experience?		Positive effect	Negative effect	No effect
In hospital, did you receive a visit from a Breastfeeding Support Volunteer?		Yes	No	
If you did receive a visit from a Breastfeeding Support Volunteer, what effect do you feel it had on your breastfeeding experience?		Positive effect	Negative effect	No effect
At any time while in the hospital did your baby receive formula?	No	Yes, at my request/ I brought formula to the hospital	Yes, staff recommended it	Yes, it was required for medical reasons
If your baby received formula for medical reasons, was it for:		Low Blood Sugars	Baby weight loss	Other
If yes, how was your baby fed the formula?		Using a bottle with a nipple	Using a cup or spoon or syringe	Other
If yes, were you informed of the risks and benefits of formula prior to your baby receiving formula?		Yes	No	
If your baby received formula in hospital, what effect do you feel it had on your breastfeeding experience?		Positive effect	Negative effect	No effect
How long was your stay in the hospital from giving birth to discharge?		Approx. 1 day	Approx. 2 days	Approx. 3 days or more
The length of your hospital stay, what effect do you feel it had on your breastfeeding experience?		Positive effect	Negative effect	No effect
BREASTFEEDING PRACTICE:				
When you left the hospital were you:		Breastfeeding only	Both breastfeeding and formula feeding	Formula feeding only
When you left the hospital, how would you have rated your confidence in your ability to breastfeed?		Very confident	Confident	Not confident
2 weeks after your baby was born, were you:		Breastfeeding only	Both breastfeeding and formula feeding	Formula feeding only

2 weeks after your baby was born, how would you have rated your confidence in your ability to breastfeed?	Very confident	Confident	Not confident		
6 weeks after your baby was born, were you:	Breastfeeding only	Both breastfeeding and formula feeding	Formula feeding only		
3 months after your baby was born, were you:	Breastfeeding only	Both breastfeeding and formula feeding	Formula feeding only		
Are you currently breastfeeding?	Yes	No			
If no, how old was your baby when you stopped breastfeeding?		weeks or months (please circle)			
If you are currently breastfeeding, at what age of the baby do you intend to stop breastfeeding?	By 6 months	By 9 months	One year or beyond		
After you left the hospital, did you experience any breastfeeding difficulties? (circle all that apply)	Latch issues/ cracked/ bleeding nipples	Milk supply issues	Other		
If you did experience breastfeeding difficulties, did you get professional help, such as breastfeeding clinics, Lactation Consultants?	Yes	No			
If you did get professional help, what effect do you feel it had on your breastfeeding experience?	Positive effect	Negative effect	No effect		
Overall, did your breastfeeding experience go as you hoped/planned?	Yes	Yes, although there were some problems/issues	No, I am unhappy with my breastfeeding experience		
If you were unhappy with your breastfeeding experience, is it because: (circle all that apply)	I did not breastfeed for as long as I planned/hoped	I did not only breastfeed (I gave formula) as I had planned/hoped	I did not enjoy breastfeeding as I had planned/hoped	Other	
Your husband/partner, how do they feel about you breastfeeding?	Very supportive	Supportive	Does not care if I breastfeed or not	Does not want me to breastfeed	
Your family, how do they feel about you breastfeeding?	Very supportive	Supportive	Does not care if I breastfeed or not	Does not want me to breastfeed	
Did you/ do you need to return to work before your baby is 1 year old?	Yes	No			
If you did/ do need to return to work before your baby is 1 year old, what effect do you feel it had on your breastfeeding experience?	Positive effect	Negative effect	No effect		
POST-DISCHARGE:					
			If YES, what effect do you feel these services/ supplies had on your breastfeeding experience? (please circle)		
While in hospital, were you set up with a follow-up appointment at a breastfeeding clinic?	Yes	No	Positive effect	Negative effect	No effect
While in hospital, were you registered for a breastfeeding telephone support program?	Yes	No	Positive effect	Negative effect	No effect
Did you receive a home visit(s) from a Public Health Nurse for breastfeeding support?	Yes	No	Positive effect	Negative effect	No effect
At the hospital were you given any formula packages, gifts with formula company logos, formula coupons, etc.?	Yes	No	Positive effect	Negative effect	No effect
After you were home from the hospital did you get formula or gifts from formula companies in the mail?	Yes	No	Positive effect	Negative effect	No effect

APPENDIX D: Informed Consent Forms



FACULTY OF
GRADUATE STUDIES

Graduate Program
In Sociology

4700 KEELE ST.
TORONTO ON
CANADA M3J 1P3
T 416 736 5013
F 416 736 5730

Informed Consent Form

Study Name: The Impact of in-Hospital Programs on Breastfeeding Exclusivity and Duration

Researcher: Gillian Elliott, MA Student, Department of Sociology

Contact: Email: elliottg@yorku.ca

Purpose of the Research: Hospitals in Canada are increasingly implementing breastfeeding supportive procedures. These procedures, typically based on the WHO/UNICEF Baby-Friendly Hospital Initiative (BFHI), aim to protect, promote and support breastfeeding in a hospital setting. This study will explore the relationship between breastfeeding supportive hospital procedures and breastfeeding exclusivity and duration rates among a group of mothers. Participating mothers will be surveyed and/or interviewed about their experiences with these procedures. The aim of this research is to explore the mother's experiences with breastfeeding supportive hospital procedures and examine the influence of these procedures on breastfeeding practices.

What you will be asked to do in the Research: Participants, who have previously indicated interest, will complete a semi-structured, in-depth interview that will take approximately 1 hour. These interviews will be audio recorded and transcribed.

Payment: Participants will receive a \$10 Walmart gift card.

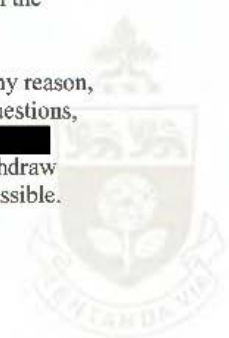
Risks and Discomforts: We do not foresee any risks or discomfort from your participation in the research. However, we are asking you to share with us some personal information, if you feel uncomfortable talking about some of the topics, you do not have to answer any questions if you do not wish to do so.

Benefits of the Research and Benefits to You: Participating in this study will not benefit you personally. Your participation may help to inform breastfeeding programs in hospitals.

Voluntary Participation: Your participation in the study is completely voluntary and you may choose to stop participating at any time.

- Your decision not to participate will not influence the nature of the ongoing relationship you may have with the researchers or study staff or the nature of your relationship with York University either now, or in the future.
- Your decision not to participate will not influence the relationship you have with the Region of [REDACTED] Public Health Department.

Withdrawal from the study: You can stop participating in the study at any time, for any reason, if you so decide. Your decision to stop participating, or to refuse to answer particular questions, will not affect your relationship with the researchers, York University, Region of [REDACTED] Health Department or any other group associated with this project. In the event you withdraw from the study, all associated data collected will be immediately destroyed wherever possible.



Confidentiality: All information you supply during the research will be held in confidence. Data will be collected via handwritten notes and audio recording. Your data will be safely stored in a locked facility and only research staff (Gillian Elliott, Dr. Pat Armstrong and Dr. Jacqueline Choiniere) will have access to this information. Seven years after the completion of the project the names of participants, consent forms, personal contact information forms, transcripts, notes and all other confidential material will be destroyed. Confidentiality will be provided to the fullest extent possible by law. Your confidentiality will be kept unless you talk about harming yourself or others (including your child).

Questions about the Research? If you have questions about the research in general or about your role in the study, please feel free to contact Gillian Elliott by e-mail (elliottg@yorku.ca); Dr. Pat Armstrong at (416) 736-2100 Ext. 22550 or by e-mail (patarmst@yorku.ca); or the Graduate Program in Sociology at (416) 736-2100 Ext. 60312.

This research has been reviewed and approved by the Human Participants Review Sub-Committee, York University's Ethics Review Board and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines. If you have any questions about this process or about your rights as a participant in the study, please contact the Sr. Manager & Policy Advisor for the Office of Research Ethics, 5th Floor, Kaneff Tower, York University (telephone 416-736-5914 or e-mail ore@yorku.ca).

This research has also been reviewed and approved by the Region of [REDACTED] Public Health Research Review Committee.

Legal Rights and Signatures:

I _____, consent to participate in The Impact of in-Hospital Programs on Breastfeeding Exclusivity and Duration Study conducted by Gillian Elliott. I have understood the nature of this project and wish to participate. I am not waiving any of my legal rights by signing this form. My signature below indicates my consent.

Signature _____ Date: _____
Participant

Signature _____ Date: _____
Principal Investigator



Informed Consent Form

Study Name: The Impact of in-Hospital Practices on Breastfeeding Outcomes

Researcher: Gillian Elliott, MA Student, Department of Sociology

Contact: Email: elliottg@yorku.ca

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What you will be asked to do in the Research: Participants will complete a brief survey which will take approximately 15 minutes.

Payment: Participants will receive a \$10 Walmart gift card.

Risks and Discomforts: We do not foresee any risks or discomfort from your participation in the research. However, we are asking you to share with us some personal information, if you feel uncomfortable talking about some of the topics, you do not have to answer any questions if you do not wish to do so.

Benefits of the Research and Benefits to You: Participating in this study will not benefit you personally. Your participation may help to inform breastfeeding programs in hospitals.

Voluntary Participation: Your participation in the study is completely voluntary and you may choose to stop participating at any time.

- Your decision not to participate will not influence the nature of the ongoing relationship you may have with the researchers or study staff or the nature of your relationship with York University either now, or in the future.
- Your decision not to participate will not influence the relationship you have with the Region of █████ Public Health Department.

Withdrawal from the study: You can stop participating in the study at any time, for any reason, if you so decide. Your decision to stop participating, or to refuse to answer particular questions, will not affect your relationship with the researchers, York University, Region of █████ Health Department or any other group associated with this project. In the event you withdraw from the study, all associated data collected will be immediately destroyed wherever possible.



Confidentiality: All information you supply during the research will be held in confidence. Data will be collected via handwritten notes and audio recording. Your data will be safely stored in a locked facility and only research staff (Gillian Elliott, Dr. Pat Armstrong and Dr. Jacqueline Choiniere) will have access to this information. Seven years after the completion of the project the names of participants, consent forms, personal contact information forms, transcripts, notes and all other confidential material will be destroyed. Confidentiality will be provided to the fullest extent possible by law. Your confidentiality will be kept unless you talk about harming yourself or others (including your child).

Questions about the Research? If you have questions about the research in general or about your role in the study, please feel free to contact Gillian Elliott by e-mail (elliottg@yorku.ca); Dr. Pat Armstrong at (416) 736-2100 Ext. 22550 or by e-mail (patarmst@yorku.ca); or the Graduate Program in Sociology at (416) 736-2100 Ext. 60312.

This research has been reviewed and approved by the Human Participants Review Sub-Committee, York University's Ethics Review Board and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines. If you have any questions about this process or about your rights as a participant in the study, please contact the Sr. Manager & Policy Advisor for the Office of Research Ethics, 5th Floor, Kaneff Tower, York University (telephone 416-736-5914 or e-mail ore@yorku.ca).

This research has also been reviewed and approved by the Region of [REDACTED] Public Health Research Review Committee.

Legal Rights and Signatures:

I _____, consent to participate in The Impact of in-Hospital Programs on Breastfeeding Exclusivity and Duration Study conducted by Gillian Elliott. I have understood the nature of this project and wish to participate. I am not waiving any of my legal rights by signing this form. My signature below indicates my consent.

Signature _____ Date: _____
Participant

Signature _____ Date: _____
Principal Investigator

APPENDIX E: Recruitment Poster

RESEARCH STUDY PARTICIPANTS NEEDED



We are conducting a study to investigate the relationship between hospital practices and breastfeeding outcomes.

Who can participate in this study?
A mother who:

- Has a baby that is between 6 weeks and 12 months of age
- Gave birth to her baby in a hospital in [REDACTED] or [REDACTED]
- Has tried to breastfeed at least one time
- Can communicate well in English

This study needs mothers who have a variety of experiences with breastfeeding, both positive and negative. All experiences are important and will greatly benefit the research.

What's involved?

- **Phone survey** OR **In-person interview** - you can bring your baby to the interview

The Benefits?

- All interview participants will receive a \$10 Walmart gift card.
- Your participation may help to inform breastfeeding programs in local hospitals.

Please respond promptly. The number of spots is limited.

To participate in the study, or for more information, please contact:

Gillian Elliott
Principal Investigator
York University
[REDACTED]
[REDACTED]



APPENDIX F: Contact Information Form

PARTICIPANT CONTACT INFORMATION FORM

RESEARCH STUDY

YORK UNIVERSITY

Name: (please print) _____

Cell phone number: _____

Home phone number: _____

Work/Other phone number: _____

Best number to reach me at: Cell Home Work/Other

Email address: _____

I _____, consent to provide my contact information to the researcher Gillian Elliott. I am providing my contact information so I may be contacted at a later date to participate in a study on the relationship between hospital practices and infant feeding. I have understood the nature of this project and wish to participate. I am not waiving any of my legal rights by signing this form. My signature below indicates my consent.

Signature _____ Date: _____
Participant